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# AMERICAN CHILD HYGIENE ASSOCIATION

FORMERLY

AMERICAN ASSOCIATION FOR STUDY AND  
PREVENTION OF INFANT MORTALITY

## TRANSACTIONS OF THE THIRTEENTH ANNUAL MEETING

WASHINGTON, D. C., OCTOBER 12-14, 1922

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HEADQUARTERS OF THE ASSOCIATION  
532 SEVENTEENTH STREET, N. W., WASHINGTON, D. C.

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ALBANY  
J. B. LYON COMPANY, PRINTERS  
1923



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## **GENERAL SESSIONS**

**President, the Honorable HERBERT HOOVER, Presiding**



## **PUBLIC MEETING**

### **MEMORIAL CONTINENTAL HALL**

**Thursday, October 12, 1922, 8 p. m.**

**President HERBERT HOOVER, Presiding**

---

### **GREETINGS FROM THE PRESIDENT OF THE UNITED STATES**

The White House,  
October 11, 1922

My Dear Mr. Hoover:

I have been much interested to know of the twelve years' successful work of the American Child Hygiene Association. Regard for the importance of child care is almost as general as that personal love for children which is the tenderest sentiment of civilization.

In serving twelve years as a co-ordinating agency for hundreds of active organizations that work for the child and in stimulating nationally the further growth of such effort, the association has rendered great service.

Your work is one which, in our country, cannot lack for financial support, unselfish personal aid or high leadership. Accept my congratulations on your past accomplishments and my best wishes for the future.

Very truly yours,  
WARREN G. HARDING.

### **PROCLAMATION OF THE COMMISSIONERS OF THE DISTRICT OF COLUMBIA**

The following letter received on October 11 by Mr. Gilbert Grosvenor, Chairman of the Washington Conference Committee, was read:

The Commissioners of the District of Columbia invite attention to the meeting of the American Child Hygiene Association, which will be held in the City of Washington on October 12 to 14, 1922. The object of this association is the promotion of health and the prevention of disease of children, which are matters of concern to all well-thinking people. A healthy child means future strong and vigorous men and women, and the Commissioners feel that it is the duty of all interested in the welfare of children to lend their aid and assistance in the work of this association.

Very respectfully,  
CUNO H. RUDOLPH,  
*President.*

## ADDRESS OF WELCOME

Mr. Gilbert Grosvenor, Chairman of the Washington Conference Committee:

I have been delegated the pleasant duty on behalf of the numerous men and women who have been laboring to make this meeting a success to express our delight that you decided to have your annual convention in Washington and the hope that you will find the arrangements that have been made for your entertainment and comfort satisfactory. It has been suggested, also, that we should congratulate you on your wisdom in establishing your national headquarters in the Nation's Capital, which you have done in this last year.

It is now my pleasure to retire in the shadow of the President of this great society, a man whose name is loved and revered by fathers and mothers of children of every part of the world, President Hoover.

## PRESIDENTIAL ADDRESS

---

The Honorable HERBERT HOOVER, Washington, D. C.

I have the honor to announce two most important events in the history of voluntary effort to advance child health in our country.

First. The practical completion of the consolidation of the two great national voluntary societies devoted to this object—your association and the Child Health Organization of America. These two great societies have for years carried the burden of voluntary effort on behalf of child health, each in its own field, your association comprised as it is of 340 voluntary associations concerned with the problems of child health up to the school age, and its companion society concerned with the problems of children from school age forward. By the consolidation of these two societies we shall now attain a great national institution coordinating all voluntary effort on behalf of child health.

Second. Through the munificence of the Commonwealth Foundation, this great association will now be able to undertake in three cities to be selected in the United States, a complete demonstration in every avenue of protection of child health. The funds assured through this source amount to approximately \$230,000 per annum for a term of years and it is proposed to choose a city in the far West, one in the Middle West, and one in the South.

The great voluntary efforts which these many societies, now grouped into a great national effort, have carried forward over a long term of years, have already borne great fruit. They have had for their object the stimulation of public interest in problems of child health, research into the most scientific methods of promotion, eventual nationwide birth registration, the advocacy of the incorporation of child health problems in problems of general public health, the enlisting of the technical skill of physicians, nurses, and educators, and the elaboration of information for parents, methods and means for development of this primary interest of children in every direction.

One figure alone demonstrates the enormous accomplishment of this great campaign of voluntary work which has been going on these many years. Infant mortality in the expanding birth registration area of the

United States has dropped from 101 per 1,000 births in 1918 to 76 in 1921. This is a reduction of 25 per cent in so short a period as 3 years. During this time there has been a growth of state bureaus devoted to child hygiene from 12 in 1918 to 46 in 1922.

These are great accomplishments. They have arisen in the proper American fashion, that is, general public agitation by voluntary effort and conviction of the public of the righteousness of definite courses of action and ultimate incorporation into official and organized voluntary action by the community.

There is much still to be done although our public concern with the education, health, welfare and joy of childhood is already far beyond that of any other country in the world. The cause of children has no opposition with the American people except the opposition of ignorance and, indeed, the files of these organizations show the tremendous desire of every community to learn the best method by which such service can be performed.

The objects of these associations are:

First. That we stimulate appreciation of the service that can be done for children and the nation in the matter of health.

Second. That the enormous activity in America for the welfare of children and mothers shall be directed in a scientific manner and by scientifically trained men and women.

Third. That these applications of science shall reach every corner of the country and every child in it.

Fourth. That these efforts on behalf of children shall be built upon the solid rock of inspiration in the local community to its responsibility, and not built upon the shifting sands of over centralization.

This association is thus an educational institution. It does not purport to train the individual, the child, or the parent. It proposes to inspire all the agencies to those ends and to assist them in their labor through its branches of research, its branches of instruction as to community organization, and its branches of demonstration.

So complete has been the recognition of the need, that the most immediate problem is the provision of expert personnel to carry on this work, for practically every community needs expert guidance that it does not repeat the failures that have been made in the past.

During the last two years, all the national associations devoted to child welfare have recognized the necessity for better coordination of



their efforts and the necessity for a greater concentration of these agencies. As a first step the National Child Health Council, of which your association is a participant, was created, embracing the principal institutions. Latterly, as I have said, negotiations have been in progress looking to the consolidation of this association with the Child Health Organization of America and its completion will make a great national association devoted to this single purpose.

The work of our societies is founded solely upon the cooperation of the state and local health and school authorities, and local physicians and nurses and under expert personnel from these associations. I am confident that the results we are now able to undertake will advance the whole cause of child welfare many years by the proof of actual results.

The ideal to which we should drive is that there should be no child in America that has not been born under proper conditions, that does not live in hygienic surroundings, that ever suffers from under-nutrition, that does not have prompt and efficient medical attention and inspection, that does not receive primary instruction in the elements of hygiene and good health. It is the purpose of these associations to supplant ten policemen with a single community nurse.

There are other great efforts on behalf of children which we embrace in our aspirations although not within the direct functions of our association — that every child in America should be free of deleterious labor, should participate in our great public school system, and should have full participation in the joys of childhood. For if we can give these opportunities to but one generation, the great sector of all our national problems will have been solved.

#### SUPPLEMENTARY REMARKS ON AMERICAN WORK ON BEHALF OF CHILDREN ABROAD

I have been asked by some of the delegates to speak for a few moments on the American work on behalf of children now going on abroad. That part of American effort in the war has, I like to think, been a chapter in American history that we can look back on for all time with pride in the interest that we have shown in children, not only in our country, but in the children of foreign lands.

To-day the American Relief Association has in its care about one million two hundred and fifty thousand children in Russia, and it is

assisted in that work by the British Children's Fund, who are themselves providing for some three to four hundred thousand children. That work is the outgrowth of work started during the war and there has been an association of that work with our British friends from the very beginning. Those of you who recollect the Belgium Relief Committee will realize that it was started jointly by the English and the American governments. Early in that work, under regulations originally established that ten million people might be provided for, it was found the children were failing and that some revolutionary measure must be undertaken if the children were to be provided for. In order to meet the situation the relief committees were summoned to their responsibilities in the matter of their children and they were required to provide for the care and feeding of their children in public institutions during the period of the war. And thus some two and one half millions of children were fed outside of the homes. There was built up a method, a manner by which that should be accomplished. With some years of experience, and after the armistice, that same body of men of that same experience, was transported to Poland, to Hungary, to Czecho-Slovak, to Esthonia. — sixteen countries formerly occupied by Germany — and a total of some millions of children were taken in care and each and every case of responsibility of local community was summoned to its own duty and the Americans provided the means, whereas the community provided the equipment and service. It became natural then when an appeal came from Russia last year, in the most dangerous of all famines of all wars, that America should carry this small army still farther eastward. During the past year we again, in association with our British cousins, have provided for upwards of three and a half millions of children. I like to think that here has been at least one ray of sunlight in this tremendously dark chapter of war and that where ten thousand and millions of men died on the battlefield ten thousand and millions of children were saved by American effort.

We have one other continuing program in relation to children; a program of which I have great hopes and in which this association and its sister association have already had some relation. After the completion of the Belgium Relief, an association which one time or another expended over a billion and a half dollars, it became necessary to determine what should be done with the final residue of money remaining in the treasury. That money manifestly belonged to the Belgium people. The Belgium government requested the directors of the

Relief Commission to determine a method by which that fund should be applied as a memorial to relief. It was no task on the imagination of the directors to determine that the fund should be applied for a permanent foundation for the children of Belgium and thereby some twenty millions of dollars have been placed as an endowment for the advancement of child welfare.

We hope from experience and inspiration that what we may create in America in behalf of childhood, we shall be able to transplant into Belgium through this foundation. And further than that the Belgians themselves have made many advances in the welfare of children, and we hope through this association with Belgium in the common work on behalf of children, we may learn something that may be a benefit to our people as well.

Mr. Hoover: I now have the great pleasure of presenting to you the British Ambassador and the great friend of America, the man who has himself shown great devotion to the cause of children in other lands. I present to you the Right Honorable Sir Auckland Geddes.

## ADDRESS

THE RIGHT HONORABLE SIR AUCKLAND GEDDES, K. C. B., Ambassador  
Extraordinary and Minister Plenipotentiary of Great Britain

Mr. President, ladies and gentlemen, I esteem it a great honor that I, who am not of your nation, should have the privilege of addressing you here to-night upon what perhaps at first sight seems to be one of the most intimate as it is one of the most individual things — the care of children. And yet I think it perhaps not altogether inappropriate at such a great national convention as this, that a representative of a foreign country should have the great privilege of speaking to you because after all children and children's health are not the property or the care of any one nation nor does all the knowledge about children and their health reside in the scientists of any one nation. Indeed in your own case it is obvious that the health of children of lands at the present far away, is a matter of concern to you because you know that many of these children, now perhaps in Great Britain or in any one of the European countries, may in a few years be fellow citizens of yours, and take their places among the parents of your future citizens. But not only that, it is equally true, although not so obviously true, that the health of children of yours, as the health of children in Europe, is a matter of real interest to us who are British because their blood, although we cannot know to which individuals this applies, will flow in the veins of the men and women of our nation within a generation or two. For there is a continual sifting backwards and forwards in the nations of the earth. Inter marriages take place. New combinations are formed and we are all linked together, whether we would or no, in the interest which is your principal interest, the health and the maintenance of the health of children. Because there is no man or woman who thinks of the future of his own nation and in imagination appreciates what citizens of other countries think of the future of their nation, who does not wish to see the nations of the future represented by strong, healthy men and women.

And so, we are all interested in this and we are all interested in what the others are doing. Every generation sees American blood pass into the streams of British blood. Much of it is passing back but much of it comes from sources that were never British. You are bringing

every day blood from Europe. I want to make that point because we are interested, extraordinarily interested, in what you are doing, not only that we may learn but because we are going to be affected by the results. And not only in the British Isles, but in Canada, to which so many American born have gone in the last few years, in Australia, New Zealand, and other parts of the British Empire. Yet this problem with which you are dealing is a world problem; it is truly in its larger aspect international. In another aspect it is national, and still in a third aspect, as your President has just so clearly pointed out and emphasized, it is local and must be dealt with by communities in their own boundaries if it is dealt with satisfactorily, efficiently, and promptly. So that we have all these aspects of this question to consider. I do not know that there is any question more important at the present time than child hygiene. Many of your future citizens are now in Europe. Many of the parents of your future citizens, now children in Europe, have passed through an appalling experience. We hear a great deal about the devastated areas in the countries of Europe, more especially in Belgium and France, in which the heaviest fighting of the war in the recent past took place, and we are apt, because we can see those ruins, to think that those are the most important devastations. To me they are much the least important in themselves. There are other devastations, and perhaps the most terrible of them all is that which was wrought by the war in the lives of countless children in many lands. I can speak with first hand knowledge, as can many of you, of some aspects of that devastated mass of childish life and what should have been childish happiness. I have seen in London, far removed as that seemed at times from the battle front, children permanently shattered as a result of bombings as I have seen children in France and Belgium apparently permanently shattered as a result of shellings and bombings, and we see all the effects which still go on. The effect of shortage of proper food, the results of malnutrition, and the result of disease following upon malnutrition. That is a devastation which the more one thinks of it the more one believes it to be the worst of the war's devastations. How many years must pass before the effects of those devastations of childish life are obliterated either by extinction of the affected or by recovery? There is a problem which is coming home to the door step and then to the fireside of every nation in the world as the blood of those children mixes backwards and forwards through the nation's arteries and descendants of those children. I do not know whether their children are going to

carry on any of the weakness that has been brought to the children of the war years. Scientifically that may seem to some of us impossible, but I doubt if one considers the complex which makes the human environment and the countless influences which pass from that environment to the child, if it is not possible, indeed probable, that for generations there will be results of practical importance flowing from the devastation of childhood during the years of the war. Apart from that, even if those children with shattered health were to have no future influence on the human stream, we have the international needs necessarily existant because of the fact that no nation can live for itself, by itself, excluding blood from the outside. No nation has. No nation ever will. We are all, we nations that share civilization, closely related one to the other. Our racial composition is no less complex than the racial composition of your nation is going to be. Our blood, the blood of the British Isles, is drawn from every part of Europe just as your blood is drawn, and your national blood is being drawn now from every part of Europe in this great mixing that is going on in this country.

We want, all of us I think, to realize that this problem of child health is not purely a national, not purely a local, not purely a family question, but is at all events, in a large part of its importance international in its interest and its appeal. And as we look forward to the long future we can imagine we are still to-day at the opening chapter of what is destined to become increasingly important as a social activity of the people. Looking back through history, we see how the races have grouped themselves, have mixed one with another and have poured for a time into those social worlds which we call nations, and then how the blood of those nations has poured out from those worlds, poured into other people and has, through mixing, formed other nations and from there again the racial stream must pour out into new lands and perhaps form still other nations. As we look forward into the future, we see — those of us who have the imagination to be interested in the distant future of our races — how we must realize that the future nations, whatever they may become, whatever stretches of the earth's surface they may occupy and control, are going to draw their blood from men and women who by no means necessarily lived within the confines of the nation as it exists to-day.

Take the very name of this association — the American Child Hygiene Association, and see how these words reach back through a long ancestry to some other part of the world. America, with all the wealth

of association, recalls the name as it began, Amerigo. Child — the only Anglo-Saxon word in the whole title of your association, calling us back in memory to the Teutonic tides that flooded into England after the Roman power decayed. Hygiene — recalling the goddess Hygeia and the sacred courts of Greece. Association — a word that comes straight to us from the republic of Rome. That is our tongue. Our blood is not less mixed. And in the future the mixing of the blood is not going to cease. We are going to draw blood from every nation that exists in the world to-day and shares our civilization; blood that will go to the building of the nation of the future, that will represent yours and mine as they are to-day.

The whole world is being made smaller and smaller by the development of transportation. High speed transportation has come forward with leaps and bounds and the world shrinks as the speed of movement increases. And with that contacts have become more close and with contacts Dan Cupid has still greater opportunities of weaving the web of human life, drawing strands from every corner of the world. And the future, and all the evidence we have shows that the future peoples are going to represent not pure races, but races mixed into some new races. And we who are interested in child hygiene are dealing with but one side of the work that ought to be done in preparation for the future. For after all, the human race, that we are so apt to think of as generations of human beings, in its most intimate, most profound meaning, the thing that lives, the thing that endures, the thing that is immortal, is the stream of the germ plasm coming down from an unknown past, sweeping into an unknown future. Generations of individuals are but the regiments, the carriers who transmit and pass away. The thing that matters to men and women who think of the future of the race is the safety, the uncontaminated safety of the germ plasm. And it seems to me that the health, the well-being, the proper development of the carriers of the day, the human beings who are the trustees of the moment, are the things for which we most should care.

And so, in speaking to you to-night, I have tried to put before you the bigger aspect. I have tried to suggest to you that this interest of yours is an interest of ours, and that our corresponding interest in regard to our own children is an interest of yours and that we are interested in what every nation that shares our civilization, aye, nations that do not share our civilization, are doing in connection with child health.

And there is another thing that we are doing. If we realize the devastation that a war, on the scale of the great war, has caused in childhood's life, I think we will see that there is at all events room for serious thought and serious discussion, as to whether any war fought, as the last great war was fought, practically among people of one race, because all of the European people are all closely related, is not in a subtle and more profound sense, non-economic and suicidal.

My life is devoted to the cause of doing what I can to secure peace, long enduring peace among the nations. I do not like to use the word permanent peace. The future is so vast, so unexplored, so unexplorable. But one can work for long and enduring peace and I believe that such an association as yours, quite apart from the great work you can do for your children, can also do good work in educating public opinion to understand something of the real cost of an appeal to arms. Every man and every woman hates the idea of war, hates the mess, the waste of war, and if they realized that it was a fact that one of the effects of war was to create a devastation through childhood, a devastation that might last for long, I believe that such a realization would come as a powerful reinforcement to their determination not through their life to draw the sword or let other nations draw the sword.

Your work touches the vital life of the human race, reaches into the very heart, the mystery of the human life. The very fact of realization of a common interest in childhood has international implications. The very fact of the realization of the disastrous effect of war on childhood has international implications. It makes men and women more serious, more responsible. It makes them realize that their vital interests are not bounded by their nation's frontiers, that their nation's interests in the future are not bounded by the frontiers of to-day. It is true of us all, of all those social organizations which we call nations. We are but molds into which races pour and out of which they pour again, and just as our language draws something of its meaning from many races and many climes in many different ages past, so do we in our bodies draw the blood of many, from many climes in different ages past.

Your work is worth doing. It is a great work. And like all work that is worth doing there is a practical, immediate side to it — something to do, something to get done, something that is worth doing at the moment. And behind that immediate visible something is the much greater invisible implication, important now, important in the future, important forever to all mankind.



## ADDRESS

L. EMMETT HOLT, M. D., LL. D., President of the Child Health Organization of America, New York

The merging of two great national health associations is an event of significance and importance; significant, as showing the present day tendency to better organization and cooperation and more efficient administration of all our health activities; important, as marking an increased ability and opportunity for service to the community.

This union has come about without any compulsion or undue influence exerted either from within or outside the two organizations. It is rather a spontaneous result of a growing feeling on the part of many persons quite independently that the entire field of child health from infancy to maturity should be covered by a single organization.

The new association has a great opportunity and accepts a great responsibility when it presumes to formulate and direct the health program for the entire period of growth. Are we equal to it? In what respects and where do our organizations need to be strengthened that we may meet this responsibility? The combined resources of the two organizations—their experience, their staff membership, the support and confidence of the public which they have enjoyed and their record of public service—form a fitting background for the new organization to begin its work. To this association both the general public and professional groups will look for help and expert guidance in matters relating to the health and physical development of children.

In the last few years marked progress has been made in solving some of the problems to which we have addressed ourselves, notably those of infant welfare. What is needed chiefly is to continue to work along lines of proven value. In other directions we have made hardly more than a beginning. Our achievements should be very greatly increased by this union.

### OUR PROGRAM

It seems desirable at this time to take occasion to look over the field and to consider different ways of attacking the child health program as they appear to us to-day. The lines of activity in which we must engage we may group under the four general headings of research, coordination, education, publicity.

### RESEARCH

While not all by any means is known of the many things which bear directly upon the health of children, our own line of research, I take it, will not be the causes of disease, the manner of its spreading or its treatment, nor foods, housing, sanitation and many other things which affect growth and development — important although all these are; our research will relate rather to methods by which the existing knowledge upon all these matters can be made effective in improving child life. We must determine how to apply the knowledge we have to the home and the school, both in urban and rural communities, and discover how what we know can be used to the best advantage so as to get results. It is an important function of our association to interpret the findings of the laboratory investigator to the man in the street, in other words, to the average parent and citizen.

### COORDINATION

This means to bring all health work for children into proper relation to the general health program of the community; to decide how much of the appropriation for health should be devoted to the welfare of children; how to bring about a relation of cooperation between the school authorities and the health authorities so as to secure the best results for the school child; finally, how best to connect a child health program with the campaign against tuberculosis or cardiac disease or hookworm or any other special health movement and to connect the work of our association with all the different organizations, public and private, now in the field. This is not an easy matter. In the past there has sometimes been friction, jealousy, and an attitude of competition where there should be only harmony and cooperation. It is worth while to consider for a moment the real cause of rivalry between different organizations which are working in related health fields. In the last analysis it will, I think, be found to be connected with the securing of popular support for the raising of funds. It ought not to be true that the organization which has the best publicity staff gets the largest contributions. Funds supplied should rather depend upon achievement. But the best body to appraise the value of achievements is not usually the one campaigning for funds. Appraisal should be made by an impartial body after careful investigation. Again, the skilled technically trained executive ought not to be burdened with budget raising. It is a great waste of energy that this is necessary in so many,

one may even say, in most of our philanthropic organizations. While there has doubtless been some overlapping in the work of different groups, there have been many more gaps which we must try and fill. The coordination of our work for children with that of other health agencies must always be one of our chief concerns.

### EDUCATION

Our educational work falls naturally into two divisions, one of which relates to professional groups, and the other to the general public. We must agitate everywhere and insistently for the better training of leaders in child health work — physicians, nurses, and teachers.

In the first place a new type of pediatricist is needed — one who has been trained not simply in a knowledge of the diagnosis and treatment of diseases to which children are liable, but who in addition knows the normal child, the conditions of growth, the principles of nutrition, practical dietetics, the essentials of school inspection; who has been trained also in child psychology, who knows the fundamentals of child hygiene, mental and physical development. He should at the same time have the organizing and directing ability to put a scientific knowledge of all these subjects to practical use in a community. *Social pediatrics* this has been termed. We must get medical schools and especially public health schools to offer courses which will give such training. For public health officials it is indispensable.

In the new schools for nursing which are projected, the public health nurse must receive the fullest opportunities which can be afforded, not only to see disease among children and obtain a knowledge of feeding, but like the doctor have the broader training in child psychology and in a knowledge of the normal child. In rural communities it will be the nurse who must bear the burden of the health education of the people. She must have training in teaching methods as well as in the fundamental sciences upon which her health work is based. She must do alone most of the work that is done for infants and children under school age.

It has become more and more evident in the last few years that the long school period, in which the child is under observation and when his physical condition may be under supervision, offers exceptional opportunities not only for the improvement in the health of the child himself, but also through systematic health education carried on in the schools,

the development of a generation of better and more intelligent parents and citizens. The effect of this will be definitely to raise the standard of healthy living among all classes. To this end it is essential that the grade teacher before she begins her school work receive special instruction in health. Courses supplying this should be given in every normal school and every teacher-training center. While these courses should be available for all teachers and indeed made compulsory, much more thorough and elaborate courses should be required for normal school teachers and for those who in our larger schools give instruction in home economics and domestic science and who direct nutrition work in the schools. Just what these courses should cover has not yet been fully worked out. But a significant beginning has been made. It is one of the subjects which just now demands most urgent attention.

### CONFERENCES

Without doubt one of the most valuable agencies in educating professional groups is by conferences. The annual meetings of the American Child Hygiene Association have been not only the great influence which has held the Association together, they have at the same time furnished an opportunity for professional workers to compare experiences and to put forward any new ideas by which the general cause can be advanced. They have done much to bring into general agreement methods of work and policies which have been developed in different communities, in other words, to standardize health work for children all over this country. Besides, these annual gatherings have furnished a great stimulus to all workers; the inspiration received has been far more valuable than the new facts acquired.

While these meetings should by all means be continued, they should occasionally be supplemented by another type of conference — meetings of smaller groups composed of those who by experience and training may be able to develop and formulate definite policies along special lines. Such a conference was the one held at Lake Mohonk in June last. This group came together to consider a single topic, viz., Health Education in Normal Schools, and accomplished a great deal in a few days. In such gatherings a great deal of constructive work is possible through discussions, formal and informal. But they are necessarily somewhat expensive and the persons whose presence is most desired are very often those who can hardly afford to attend. To be successful they must

usually be subsidized. They have a very important place in the general scheme of professional education and one which greatly needs to be developed much further.

Quite as important as the foregoing is *the education of the general public*. There are a number of agencies through which we may hope to reach it. We must furnish the public with accurate, trustworthy information with regard to all the different aspects of child health. We need a dignified but carefully planned campaign of health propaganda. This may be conducted in newspapers, in weekly and monthly periodicals and elsewhere. The physicians and other educated and specially trained workers must furnish the facts. But these facts must be presented to the public in such a readable form as to catch and hold popular attention. There are very few professionally trained persons who have the ability to put things in such a way as to interest the public. And for this reason many of our best efforts have often been fruitless. A reform is greatly needed.

The *motion picture* offers without doubt very great possibilities as an agency for health education. Its chief value is in keeping the subject of health before the popular mind. These films must be reliable as to their facts and the material which is featured, but this must be put in form by the professional cinema people.

Popular lectures and addresses must always form an important part of the program for the health education of the public, particularly the nonreading public, but their chief value is probably to awaken the interest in child health work of special groups like women's clubs, parent-teachers associations, churches, settlements and other social agencies. Hitherto this has been done but only in a very casual way. It should be organized and enlarged and made one of our important regular fixed activities.

There is a constantly increasing demand for speakers who possess not only the knowledge but who have the ability to arouse enthusiasm and interest. Their work should be supplemented and followed by that of other field workers who have the capacity to organize such an awakened interest.

Fully developed and well considered plans for a child health movement in various types of communities should always be available and when nothing else is possible either given through leaflets and directed through personal correspondence; but much more effectively by a trained

worker who could be sent to the field for a brief period to assist in organizing a movement.

*Leaflets* of several types are clearly needed: first, those for teachers and other professional groups such as physicians, nutrition workers and nurses; second, those in simple and attractive popular form for parents — fathers as well as mothers; third, health literature prepared for children themselves.

The health leaflets now in use should be subjected to thorough revision and sent out only after being carefully edited as to matter by competent professional authorities and put into shape for popular use by an experienced publicity person. This applies especially to such literature as is intended for popular use; but even that designed for professional groups is increased in value many times by a similar method of presentation.

A better, more accurate, higher class and more attractive literature is urgently needed in subjects relating to infancy, the pre-school period, the school period and the working child, if better results are to be expected from its use.

The magazine "*Mother and Child*" now published should be enlarged and made more popular and attractive. It is difficult, but I do not think impossible, for it to contain material of interest to all the different groups mentioned above. It should be a magazine which not only every intelligent mother but every nurse, teacher and physician will find to be indispensable. Such a magazine should command a wide circulation and after a time might become not merely self supporting but even a very considerable source of revenue to the association. Of course this means an expensive and highly trained staff and for some time a considerable financial burden. The venture may be too large to be even considered at present.

The alternative is using the popular periodicals now in existence. Several of them have signified a willingness, even a desire, to carry a health page; some will even pay for material, if the right sort is furnished. As a channel for reaching the home nothing approaches them in value. This matter should be the sole duty of members of our staff, guided by the advice of a special committee and without large expense on our part it will have a nation-wide influence in popular health education.

An excellent beginning in health literature for children has been made by the Child Health Organization. The remarkable success of some of its publications shows what is possible along this line. We must be able to command the best artists for illustrations, the most attractive printing and the cleverest writers. The best literature of this sort is invaluable; but the publication of any but the best is a waste of effort and of money. It is right in this department of health literature that one of the most important functions of the new association will operate. In the past the production of popular health literature has been very casual, without definite plan. A great forward step must be taken but of course this requires money, a good deal of money to do it right, but after the initial cost of preparation has been met, good literature distributed can be made to pay for itself as the experience of the Child Health Organization has demonstrated.

*Health Exhibits* are another form of publicity of great value if of the right sort; but utterly worthless as propaganda when containing merely statistical material like so many of the exhibits that have been used in the past. There is an opportunity here for much ingenuity and originality.

To enlighten the public in health matters is not quite the same as to secure public action. Logically education must precede action, but as a matter of fact the two go along pretty much together; education appeals to the intelligence but action can seldom be secured without an appeal to the emotions. The wide gap between what we know of the laws of health and what we actually use in our daily lives is a reflection upon our common sense. In health, as in everything else, how rapid progress would be if to do were only as easy as to know what to do. It is one of the principal functions of this association, I take it, to bridge this gulf between science known and science applied.

To get this over to the general public we must make use of publicity and propaganda of the cleverest sort, the very best that can be produced. We must advertise health; in the modern phrase, sell health to the country, as patriotism and liberty bonds were sold during the war. And it can be done; but we must consent to make use of some of the methods of modern business. To some of us, particularly to us who are physicians, this idea is somewhat repulsive. It seems undignified. But I do not think it need be so. We must seek to make truth as well known as error, not spending our time or our efforts in combating false ideas

about disease, its prevention and its cure by quack methods, but in putting before the public the idea and the ideal of health as a thing to be desired by all, and to be attained by most thorough obedience to laws which science has made quite clear and definite. These are the laws of personal hygiene. If the public is to be permanently influenced we must teach the children the fundamental principles of health and, at this imaginative and susceptible age when habits are formed, the practice of health rules. The systematic and effective teaching of health in all our schools seems now to be the most important and direct way of reaching our goal for the present and the future generation.

**Mr. Hoover:** I now have the great pleasure of introducing to you Miss Elizabeth Fox, who, as you all know, is president of the National Organization for Public Health Nursing.



## ADDRESS

ELIZABETH FOX, R. N., President of the National Organization for Public Health Nursing, Washington, D. C.

Mr. Chairman and fellow workers: It is 10 o'clock and I know you will be delighted when I tell you that your President, Secretary Hoover, and Dr. Holt have given two-thirds of my speech, so you have only one-third left to listen to. It is rather difficult to sit on the platform and listen to your own speech being made and wonder what you are going to have left to say, but Mr. Hoover and Dr. Holt have put it far better than I could have.

Mr. Hoover said that two of the aims of the amalgamation were to spread scientific knowledge and to spread it through scientifically trained workers. Dr. Holt said that among the workers upon whom this burden would fall was the public health nurse, and that in the rural communities she was practically the only worker available and must carry the whole burden, or much of the burden, of health education. And then he went on to tell you that in order to do this she needs a better education than she now has. He told you what subjects the pediatrician of to-day needs to study as a supplement to his medical education and as I listened to those different subjects as he named them, one after the other, I discovered that they were the very ones I had intended to say were needed by the public health nurse. She too needs first and foremost knowledge of the growth and development of the normal child. She needs to know about normal nutrition. She needs to know mental hygiene just as Dr. Holt thinks the pediatrician does. She needs more than that. Certain subjects which Dr. Holt has not named for the pediatrician because they are already included in the medical curriculum must be included in my list of studies in which nurses need more instruction. She needs a much more thorough knowledge of the various sciences, if we expect her, as we do, to teach the principles of health in the homes. She must have an exact scientific knowledge of what she is talking about if she is to answer the thousand and one extremely pertinent questions which the mothers and fathers whom she is addressing will put to her. Moreover she must be able to answer in so convincing a way that they will be willing to in-

venience themselves considerably to put into effect the advice she has given them. If we in this room who are interested in and educated in health stop to think how little we practice the health habits which we preach every day, we will realize that for the average person who is not interested in health and not educated in it, as we supposedly are, our teaching must be made very convincing if we are to succeed in getting him to change his way of living. I am sure the only way we are going to convince not only the intelligent person but the average person, and even the little child, is by having back of our arguments a sound knowledge of what we are talking about, although we often must express it in the simplest and most unscientific terms.

And now if the nurses need these things (I would not limit these needs to the public health nurse for I think private nurses and institutional nurses need them quite as much as the public health nurse), how are they going to get them? I am going to be absolutely frank with you. Take the sciences first in our schools; chemistry and biology frequently do not appear in the curriculum; bacteriology is sometimes missing; anatomy and physiology are always given, but it is startling what a large proportion of the time and attention given to those two subjects is devoted to anatomy and what a small proportion to physiology.

Why this is I do not know, but it seems to me very unfortunate in view of the great need of the public health nurse for a more thorough training in physiology and hygiene.

Then take the subject, the growth and development of the normal child. I do not believe the majority of the schools would know what you were talking about if you were to ask if this subject was in the curriculum.

You nutrition people will agree with me because I know you feel just as I do about the teaching of dietetics to student nurses. It is a great pity that it is limited so largely to diets for the sick and includes so little, if any, instruction in normal nutrition.

Mental hygiene, one of the most important subjects, is not to be found in the majority of our training schools. If it is there it is not in the form of mental hygiene as a rule, but in the form of psychiatry. Again the abnormal and not the normal.

We public health service nurses know we must have a more thorough and appropriate education for our work. Our superintend-

ents of training schools know it too. You then ask why is it not possible? Why, to-day, do I have to speak of our inadequacies? Because it does not rest entirely in our hands to change the situation. It rests with the medical profession; it rests with nutrition workers; it rests with trustees of hospitals, and it rests with the general public. And that is why I am speaking to you to-night as I am. It is why I am being very frank in stating the weaknesses of our training. I believe that right here among the members of the American Child Hygiene Association are to be found those who can help us change our education as you want us to change it, and we want it to be changed. Just as Ambassador Geddes said, "Nations are interdependent upon each other," so are we health workers interdependent upon each other. We are serving a common cause, the health of our children. We are in partnership. It is true that a firm is as strong as its weakest member. We are all weak in some respects and, therefore, it is necessary for all of us to help each other to make up our respective deficiencies. It is for you to help us to bring about the changes necessary in the education of nurses, if we are to perform the work you want us to do and get the results you expect of us. I presume there are ways also in which we can help you. You have only to tell us and we will do what we can.

Take the pediatricians in the American Child Hygiene Association; we are dependent upon them for our instruction in the growth and development of the child. Dr. Holt said that they have to learn it themselves first. Maybe that is why they have not yet taught it to us. But if you pediatricians want the public health nurse to be effective in her teaching, if you want her to carry your messages into the home and to interpret them in such a way that they will be put into practice by the parents, you must teach us about the normal child and its development. And you nutrition workers of the American Child Hygiene Association, if you want us to be intelligent partners, furthering and not hampering your program and not making it more difficult for you because of our lack of knowledge, you must give us that knowledge that we do not have.

And so you members who are trustees of hospitals, if you want the public health nurse to be a real teacher and to be convincing in her teaching, she must have the right kind of education and you must see that she gets it. I know that trustees of hospitals always have many financial demands to meet and usually have not adequate funds. But perhaps

you will be a little more sympathetic with the superintendent of nurses when she says she must have a laboratory, she must have class rooms or a library, or she must have this or that teaching facility in order that her student nurses may be more efficiently taught. When she asks you for these things you won't decide that they are not essential, but realizing that the nurse can only do what her education prepares her to do, you will find the money. I know that you will do your best.

The worth of the child hygiene work in the future depends to a considerable degree upon this newly amalgamated association whose future name I do not yet know. The various workers in the field of child health need better preparation, else they cannot meet your demands or your expectations. Your voice will be heard all over the land. You can do much to help us. The superintendents of nurses will try all the harder to raise educational standards if they are supported in their efforts. If I have been too vehement, it is because we must have you back of us. The burden of my whole message to-night is that we public health nurses will do our best in this great movement of child health education, but we can only do our best if all of you will help us.

**THE TRAINING IN NUTRITION NEEDED FOR CHILD HYGIENE  
WORKERS**

**ALICE BLOOD, Ph.D., Director of School of Household Economics, Simmons  
College, Boston, Presiding**

Dr. Blood (in opening session): It is altogether fitting I think that the opening session of the Association should be devoted to the subject of training in nutrition needed by child hygiene workers. I think everyone here can accept as a premise that it is not only a part but a very important part of any health program. We shall devote our attention this morning to the question of the nutrition problem; how to secure the greatest support, the greatest reward for the expenditure of our energy; how to reach the maximum number of people, and most of all how to educate our people to go into the field as specialists so that they may have the greatest possible grasp of the significance of their problem and understand that the thing they are dealing with is a community problem. There is no one who has devoted more time and thought and has contributed more to nutrition than Miss Rose of Cornell University, Ithaca, N. Y. She is the first speaker on the program this morning.

## PROBLEMS IN TRAINING NUTRITION WORKERS

FLORA ROSE, School of Home Economics, New York State College of Agriculture, Ithaca, N. Y.

Essentially the nutrition worker is a teacher. She may not always work in the familiar and protecting shadows of the classroom. Often, indeed, all her duties may lie entirely outside its confines. Her major problems are those which any teacher thoroughly awake to the opportunities and responsibilities of her work faces; namely, how to make instruction function.

If there is any failure to recognize the nutrition worker as a teacher it lies in our narrow conception of teaching. We have been prone to let it off easily as a purely classroom performance requiring little skill in organizing and administering knowledge to people. We accept too readily as real teaching some simple form of instruction to individuals or groups. We have not set up as an objective for the teacher as well as for the nutrition worker some plan which sets the community at work on improving its welfare by making practical application of the instruction given. We have not defined the problem of teaching whether in classroom or field as one of organization and administration as well as of simple word instruction.

The difficulties of the nutrition worker are often more extreme than those of the classroom teacher and her failures more conspicuous and easier to detect. If the teacher's hold on organization is poor and she fails to make her work function through the class room to the community, both she and the community may be unaware of the fact for neither may recognize her obligation to accomplish that result. Not so in the case of the nutrition worker. The burden of proving herself rests on her own shoulders. She must largely organize the groups she instructs. Having secured an audience she must hold them by the slender thread of the interest she may arouse, and by the conviction she may leave with them of the importance to them of the thing she has to contribute. Simple instruction will not accomplish this goal. She must first win, then hold, and finally set to work forces and people. If she is unable to do this, she fails as a nutrition worker for her audience is critical, analytical, has a voice to object and no compulsion to attend. It remains only so long as it is satisfied. Unsatisfied, it fades away.

It is our problem to train the nutrition worker successfully to meet these situations; to give her the knowledge, skill, ideals and convictions she will need to make nutrition function in the community. To accomplish this we must know her as an individual.

It is our problem to find out the kind and amount of knowledge she should possess; the extent to which she should have skill in using knowledge before she begins her work; the ideals and convictions which she should nurture to make knowledge and skill function first in her own practices or behavior and through her in the practices or behavior of the community. To accomplish this we must know community nutrition needs and how the community reacts to the worker. It is our problem and our obligation to find ways and means to accomplish these results. This may mean seeing curricula and courses in a new light and making changes in our methods of organizing and administering the plans we have for training the nutrition worker. This is neither the time nor the place to go into the details of a possible curriculum to be built around the nutrition worker. It is opportune to point specifically to the main factors which observation of her work indicate for our consideration.

The knowledge which the nutrition worker must possess should unquestionably center around the subject matter of nutrition. The principles of correct feeding and nutrition with all that they imply of related subjects should be so thoroughly grounded as to become as nearly automatic in her thinking as possible. There must be no question as to her clear cut, concise, accurate information of the material she is to use in instruction.

At the present time this constitutes the part of her training which is most often well done. It also marks in many cases the point at which we have halted in preparing her for her work.

Having equipped her with a sound foundation of the principles which govern human nutrition, we have drawn the conclusion that she may be left to complete the task for herself. Seldom is she able to do this well until she has wasted time, money and effort. It now takes her too long to get to work. We must carry her farther before we send her out if she is to do the task we have set for her.

Other facts she needs equally with those of nutrition. Each nutrition problem she meets may bring with it some further problem of human behavior, of organization, of administration, of economics. She must, therefore, have a background of the principles of educational psychology, of sociology, of organization and administration, and of economics.

These with her knowledge of nutrition and all that goes to constitute it will be the main tools with which she will constantly work. They should be the best of their kind.



It is not enough to give her the tools. We must teach her how to use them. Before she goes into her work she should have developed some ability to apply the principles of feeding to practical problems in feeding people, specific families and individuals under various conditions. This calls for a round of actual experiences, opportunities for which must be provided. If a real baby is to be fed, she must be able to feed that individual baby in its particular environment, hampered as it may be by a variety of situations which she must be able to understand, account for, and control. The principles of infant feeding will be one tool which she uses to work on the problem. By the nature of the problem, however, it will not be the only tool. She must learn to use it along with the others.

From her knowledge of nutrition and her skill in applying it to feeding real people, we must teach her how to organize projects in nutrition which will function in the community.

We must give her opportunities to study human relationships through situations of our creation. When she is feeding the baby we have mentioned, a large part of her problem is one of the mother or of some other human being whose convictions or shortcomings are the determining factors in the result. We must give her practice in working with individuals and with groups. From her ability to live harmoniously with others we must develop the ability to organize functioning groups of people. We must give her opportunity to practice leadership. We must show her how to administer a nutrition project through the group. An apprenticeship must be provided which will develop and test her skill.

From power to meet a group we must seek to develop skill in reaching through the group to the individual, ability to give face to face instruction while instructing the mass. This means carrying the organization and administration of subject matter to people to a point where the effects of case work may be secured without its limitations. Individual needs must be satisfied while working through the group.

Finally throughout the whole fabric of her training must run our design to awaken her to a full consciousness of the world about her, to foster in her ideals, attitudes and convictions that will function automatically in her practices. She must learn not only to see but to feel the individual. She must visualize beyond the problem of obesity to its practical application in feeding fat people. She must know it as a personal problem of this particular fat woman or man or child. In the emaciated child she must see not only that individual youngster but

a future adult of lowered efficiency. She must be certain of her personal responsibility for trying to change it. In the food which the mother eats she must see the flesh and blood of the baby that is to be produced. It is her own belief in its meaning and importance which will carry over to the information she is trying to give to other mothers through that special mother. Her convictions must be so real, so deep and so sure that she will leave a lasting impression with the individuals and groups with whom she works. She must have a nutrition consciousness and conscience, for only in this way will she be able to build up a similar attitude in the community.

The nutrition worker who is to become a really effective part of the community must be an organizer and an administrator as well as an instructor. She must have a superior equipment of tools with which to work. She must understand them and have some measure of skill in using them. Her performance in the community must be based on sound convictions and high ideals. This is the goal we have set for her. Ours is the problem of preparing her for it. We can do these things for her only if we know her, understand her, and adapt courses and curricula not to nutrition workers but to each nutrition worker.

The impossible has not been proposed. Every detail is already in operation in individual units in most institutions now training nutrition workers and teachers of nutrition.

What remains to be done is small in amount and large in importance. It has its difficulties, however, for though it involves little in the way of changes in the subject matter of courses and curricula, it involves a great deal in the way of changes in the point of view of persons organizing and administering them. It necessitates a change in emphasis from logical to psychological. It demands that the needs of the individual be recognized and ministered to through the instruction given and that information take the second place. In other words, we must stop teaching subjects and begin to teach nutrition workers. If we ask them to understand and minister to the needs of the individuals in a community, can we do less for them?

**Dr. Blood:** I think the people in public health work who are interested in organizations are much perplexed to know how many specialists organizations are able to support, specialists in the sense of the class of workers that Miss Rose has just been describing. It is quite obvious we cannot afford to duplicate the nursing service in the group of specialists. Miss Edna White, Director of the Merrill-Palmer School, Detroit, will speak of the special training needed for people who are to supervise the nutrition workers training for the general field work.

# NUTRITION TRAINING FOR GENERAL FIELD WORKERS

EDNA WHITE, Director, Merrill-Palmer School, Detroit, Michigan

Since the place of nutrition in a health program is receiving more and more attention, the problem of training field workers and specialists in allied fields has become a pressing one. In the beginning the nutrition specialist reacted, as have specialists in most other fields, against the offering of general information courses because of the danger of misguided use of superficial knowledge. However, it became quickly apparent that home visitors in many fields were constantly being questioned about food problems and very naturally answering such queries to the best of their ability. The need of giving such workers accurate elementary information, as well as showing them the dangers of misinformation, has led to an entire change in the attitude of the nutrition specialists.

At the meeting of the American Home Economics Association in August of this year, the following resolution was passed:

Inasmuch as most school and health groups are agreed that health instruction must be given to all pupils in the school system and that nutrition is a vital subject in this education, it follows that the home economics teacher, on account of her unique training, is the logical person to assume the responsibility for the nutrition subject matter included. In view of these facts, the following suggestions are made:

\* \* \* \* \*

(b) That the home economics teachers give a definite course of instruction in nutrition to the grade teachers who will, in turn, be responsible for incorporating it in their regular school curriculum.

\* \* \* \* \*

(d) To further this unified program, courses in nutrition should be offered by the departments of home economics of normal schools and universities to elementary teachers, physical training teachers, nurses, and home visitors. \* \* \* It is desirable that these courses be accompanied by work with classes of children.

I wish now to present briefly some experimental courses given by the Merrill-Palmer School in Wayne County, Michigan, last year, of the types suggested by the American Home Economics Association.

Our first request came from a group of Red Cross Nurses working in the county, who felt the need of information along nutrition lines. They came in for a two-hour period every Monday from October to

April. The work was given by our nutrition specialist, Miss Lila Skinner, and much illustrative material was used so that the work might be as concrete as possible.

The lectures had been visited occasionally by the directors of public health nursing in the city and they requested similar courses for their nurses. As a result, every group of public health nurses (about 250 in all) has been given a special informational course in nutrition — which, they testify, has been of great help to them in their contact with the mothers they visit. It has also resulted in closer contacts between the nurses and nutrition specialists and a better understanding of how to use the specialist.

In the effort to extend the health teaching into the schools of the county, we found that in most cases the services of special teachers could not be considered, since most schools were too small to support any except the regular elementary staff, and in no case were there special teachers enough to reach all the children in the schools. In addition to this, the programs were already so crowded that the teachers resented the introduction of new subjects.

In order to meet these problems, it seemed necessary, first, to plan ways and means of training the regular elementary teachers so that they would be able to present the work and, secondly, to incorporate the nutrition material into some course already scheduled. With the very young children it seemed possible to make use of the reading class and a supplementary reader for first grade children was prepared. It is expected that, in all, a series of four will be available for use in the first four grades. Above the fourth grade physiology seemed the logical subject with which to incorporate the nutrition and health information, since it was nominally already included.

A tentative bulletin was prepared which was intended to furnish sufficient elementary information regarding food, so that it might be possible for the child to make an intelligent selection and develop good food habits. It is expected that this will be revised in the light of criticisms and suggestions from the teachers themselves.

The nutrition supervisor for the county, Miss Iva Church, employed by the Red Cross, gives a short course which prepares the teachers to use this nutrition subject matter and which is accredited toward a bachelor's degree by the Detroit Teachers College and the State Normal. These courses are given in various centers in the county during the year and at the summer sessions of the Teachers College.

This school work is supplemented by the work of the Home Demonstration Agent, the physical examination and Modern Crusade of the Tuberculosis Society and has, as well, the interest and hearty cooperation of the County School Commissioner, the Detroit Teachers College and the City Board of Health. All these agencies meet together under the name of the County Nutrition Committee so that there may be no duplication of effort and a clear understanding of what each has to offer. Our experience leads us to feel that training courses for field workers, including teachers, are welcomed by these specialists in other fields.

**Dr. Blood:** It is clear some of our thinking needs to be done about the school problem and that a large proportion of our community problems are going to be solved through the schools. It is a pleasure to introduce the next speaker, Miss Emma Dolfinger, Associate Director of the Child Health Organization of America, New York City, who will speak on training needed by nutrition workers for public school service.

## TRAINING REQUIRED BY THE NUTRITION WORKER IN PUBLIC SCHOOLS

EMMA DOLFINGER, Associate Director, Child Health Organization of America,  
New York City

Any individual gets his all-round training for his job through so many different contacts and experiences that it is extremely hard to say exactly what would be the avenues through which he acquired this equipment, and this statement is particularly true of the successful nutrition worker in public schools. However, it is quite possible to indicate some of the attainments which make for success, and from these to deduce possible sources of the acquisition of these qualifications.

Nutrition work has demonstrated, without question, its immense value in a public school health education program. What has not been demonstrated, and perhaps will not be for a long time, is the most effective use that can be made of the nutrition worker's time and training. To a large extent, this is because nutrition work in the public schools is obviously part of the general health education program, just as physical training, medical examination of school children, nursing service, are. Each of these branches has somewhere or other been the starting point for health education programs, and as these programs proceeded, each embraced of necessity, some of the fundamental subject matter and practice of the others. The general supervisors of instruction, and the unspecialized grade teachers also undertook health education programs and soon found themselves facing the need of dealing with problems in nutrition, physical education, and general hygiene, and requiring the help of specialists.

The consequence of such a development of our health education movement is that nutrition specialists have been called to public school service in several rather different capacities, and have had greater or less success according to the nature of their experience other than their technical training for the profession of nutrition specialist.

The chief types of public school service in which nutrition workers find themselves to-day are:

1. Aides and advisors to the teaching, administrative, and executive staff of a school system, on a plane with the supervisors.
2. Special teachers in charge of health education or some phase of it, as cooking and dietetics, on a plane with the special art, music, physical education teachers, meeting all pupils in the assigned grades.

3. Directors of nutrition classes, having in charge the restoration to standard or normal condition of the malnourished groups, *i. e.*, special workers.

Where a nutrition worker is a supervisor, as in the first group, her duties generally include:

a. Working out with supervisors of instruction the details of the time, and the gradation and correlation of subject matter, of nutrition instruction which must be included in the health education course of study.

b. Planning, or helping the home economics person in the system to plan, a proper system of school lunches and perhaps working with the administrative officers for a school regime favorable to good nutrition of pupils and teachers in other respects than food provision.

c. Training the classroom teachers in the essentials of nutrition and their common sense application, as these are necessary to a child's health education.

d. Providing proper reference facilities for teachers and children. It might be said that no nutrition project, however conducted, can do the most good unless the classroom teachers are so aided by a supervisor trained in nutrition in this and foregoing ways.

Where the nutrition worker is the health education teacher or the home economics teacher, she has a different set of duties, because she is then in direct contact with the girls and boys of varying ages from kindergarten to high school, according to the nature of her assignments. Her problems include, perhaps, the construction of her course of study as well as its execution in such a way as to secure results in improved health habits and live interest in the same. She will need to know how to balance up her nutrition instructions with the other phases of health education, so as to secure a well-rounded result. She will need to work harmoniously, and with economy of time, with the other teachers. She will need to study the facilities of school and neighborhood and to adapt her teachings to both these and her ideals, and through it all she will need to know *how to teach*, in the modern sense of securing pupil development through self-directed activity.

If she is not the lunchroom director, she should, through authority and personality, be able to work with the director to the end of having the school lunch the best and most effective nutrition-teaching situation in the school.

Where the nutrition worker is attached to a nutrition class for the under-nourished children in a school group, her field is narrowed in some ways, in that she had a more homogeneous group, nutritionally speaking, but her responsibilities as a social worker are extended, her resources in imaginativeness, ingenuity, buoyancy, are more largely called upon to save her intensive work from going stale on itself. She will also be expected to preserve a truly scientific lack of bias in keeping records, since at present the results of this type of work are being closely scrutinized because of the significance to general school procedure in health education. If there is no statistician available, she should know something of compiling and interpreting her data.

With such possibilities in mind, these seem to be the qualifications school officers would look for in nutrition workers to assure them of success:

1. Sufficient understanding of school administration to work effectively with supervisors of instruction.
2. A knowledge of the content of elementary school subjects as taught, to see possibilities of correlation with the existing system.
3. Familiarity with the work of the physical education director, the school-nurse, and the medical director.
4. A knowledge of the principles and practice of teaching.
5. A knowledge of child psychology.
6. Personality, ability to work with other people effectively, agreeably, and without friction; power to appeal to boys and girls; a social consciousness and physical health. These last three are of paramount importance.
7. Advantageous but not as essential as the above:
  - a. Playground experience.
  - b. Statistical training.
  - c. Ability in public speaking and story-telling.

There has been no mention made, of course, of adequate technical subject matter training of a nutrition worker, since in the nature of the case that would be provided for. Practicability and adaptability of subject matter are above all important for public school workers, but that lies in the worker's genius for using her technical armament, as well as in the wisdom of the college instructor, in making her students feel that their profession is, of all others, valuable in proportion as it functions in the lives of the people.



How to get these qualifications is the final question. Certainly some are nature's gifts, but their semblance can be cultivated if the need is recognized. Some come only through experience of living with people. A normal school experience, however, is a short cut to most teaching and management, skills otherwise acquired through more or less long and painful experience. Much trouble and some failure would be saved if the student of nutrition who planned to go into school work could have inserted into her training a semester of observation and practice in teaching some of the *common school branches in a primary and a grammar grade*, as well as some lectures on child psychology, on school administration, and on the curriculum.

Before beginning in any system, the worker should be given the chance to study the organization of the system, the aims, and the curriculum of the school in which she is to work, in order that she may be able to adjust herself and her contributions in the most effective way to the needs of the school community which she is to serve. At the present time successes have been achieved by people with such a varying experience and training that we are not in a position to be dogmatic about what are the indispensable features in the public school nutrition worker's training. We must be content through discussion, through careful evaluation of results, and an attempt to get at the factors contributing to the same, to arrive at increasingly better and more practical methods of training these most valuable health education workers.

**Dr. Blood:** The papers are now open for discussion. It appears to me the schools cannot entirely take care of the nutrition problem. I think this association will continue to have its own proper place even when the schools are completely organized. The first speaker for discussion is Miss Margaret Sawyer, Director of Nutrition Service, American Red Cross, Washington, D. C., another organization which will have work for some time to come in nutrition.

## DISCUSSION

**Miss Margaret Sawyer, Director of Nutrition Service, American Red Cross, Washington, D. C.:** I hope that we shall not be discouraged by Miss Rose's reference to *some* of the problems in the training of nutrition workers. I assume we may hope that she has mentioned *all* of the problems, so staggering are the problems she has put before us.

As Miss Rose has pointed out, the successes and failures of the nutrition worker are obvious and conspicuous. In analyzing the causes of success and failure one realizes that many of the problems the workers meet in the field can be anticipated during their training. To be sure many times the remedy lies entirely beyond the control of the worker or the family. The cause may have to

be removed by community, state, or federal legislation. However, in the majority of cases the worker can assist the family to solve its nutrition problems.

It is not an easy task to change food practices. It not only means overcoming the food prejudices of the individual with whom the nutrition worker is in contact, but perhaps of several members of the family. Sometimes the father determines what the entire family is to eat. It therefore becomes necessary to convince him that he must change some of his habits before proper food may be secured for the child that may be the immediate concern. An adjustment may have to be made in the family food budget, or perhaps the local markets make an adequate food supply impossible. Here I am reminded of a recent trip through Oklahoma. A grocer told me that he was going to discontinue the buying of oatmeal because as soon as he bought it, it was sold. Here the grocer had to be educated. Again a suggested change in food practices may require more time in the preparation of the food. Many women object to this inconvenience.

Miss Rose emphasized how important it is that the nutrition worker be convinced of the truth of her message. Unless she does believe that food bears a definite relation to health during the entire period of life, she is not going to be sure that she has adequate food and if she does not, her influence will be greatly decreased. Again I am reminded of one of my friends who said, "I should think that it would be discouraging to observe the food that is eaten by the nutrition workers you know."

I liked what Miss Rose said about winning the confidence and help of people and then putting them to work. In order to do this the nutrition worker must have training and subsequent experience in community organization, in addition to a very thorough and practical knowledge of sociology and psychology.

I should also like to recommend that every worker have some clinical experience in a hospital. I think that she should have a chance to observe, if not conduct, some feeding experiments with animals, which demonstrate the effects of an inadequate diet. Many of us fail to appreciate that the effects of a slightly inadequate diet over a long period of time may be just as serious in its results as a radically inadequate diet over a shorter period of time.

I wish that I could assume that the majority of nutrition workers now in the field have adequate subject matter. This is obviously of maximum importance. The speakers who have preceded me have courage to assume that they have. We have people who have subject matter but who do not know how to interpret it in actual food for a real family. Miss Rose has mentioned this group. We have another group of individuals who have a little empirical information and apply that to all cases, everywhere. They talk glibly about the "health-giving qualities" of certain vegetables and emphasize their use in communities in which these foods are not available. We have many of these so-called nutrition workers who have had a two, three or six weeks course and are being employed in our schools as trained nutrition workers.

I have one more minute. In it I wish to emphasize the necessity of bringing to the faculties of our universities, colleges, and normal schools women who have had practical experience in the field. Our students must be trained by faculties who have more than theoretical knowledge and ideas. Their theories

must have been tried and found to be sound. Unless we do this we are going to continue to send out from our schools students who are not equipped to solve the problems they meet.

**Dr. Blood:** We have all been impressed by having our own eating habits criticized. There is just one bit of consolation. Every little while I get a letter from Pennsylvania. Pennsylvania has the right idea about food, an idea that they can be proud of. I don't know whether they have it or not but at least they ask for someone who can advise what food is right to be served. The next speaker is Miss Katharine Pritchett.

**Miss Katharine A. Pritchett, Supervisor of Nutrition, Department of Public Instruction, Harrisburg, Pennsylvania:** The training of the nutrition instructor and of the field nutrition worker has been presented on such a broad, comprehensive scale that I feel free to diverge from the topic of the morning, and to bring to your attention another aspect of the subject, of vital importance at this time. I refer to the training of the school men, especially those who manage finances and control curricula, of many of the physicians, and even of the directors of health education to appreciate the need of organized nutrition instruction and the place of the nutrition worker in the school program.

Until these educators recognize nutrition as a fundamental basis of health, and as a science the practical application of which bears a direct relation to progress and achievement; until they realize that defective nutrition increases the school budget in proportion as it increases the number of retarded children, we shall not be able to find places for trained nutrition workers.

The need of nutrition as a part of the school curriculum taught to every child attending the public schools in such a way as to improve his food habits, is not yet understood. We who have a vision of nutrition in its relation to health must use every opportunity to educate those who are controlling the promotion and development of health programs. Furthermore, we must convince those in authority that incorrect teaching of food principles leads to the establishment of improper food habits, and that habits formed during these early years will probably be continued throughout the life of the individual and may be passed on by him to the next generation.

I find educators representing the best universities of the country, men of broad vision, who are enthusiastic about employing physical education instructors and school nurses but who fail to see the need of a trained person to conduct and supervise nutrition.

Recently in discussing the organization of a health program for cities of over 25,000 a director of health education, when asked if he was not planning to include in the personnel a trained nutrition worker, replied, "I may not be scientific, but it seems to me anybody can feed a child."

In some communities where a nutrition worker is employed she is looked upon much as is the consultant physician in the medical world. She is expected to appear only when malnutrition has reached an acute stage, to advise and to recommend, and then to retire leaving the case to the classroom instructor and the school nurse. Dealing with malnutrition is only a small part of the duty of the nutrition worker. To overcome this situation school authorities must be

educated to recognize the duties and the place of the nutrition worker as they now recognize those of the physical training instructor and the nurse.

Over a year ago, during a conference of the principals of the thirteen state normal schools, the State Superintendent asked me to present to the conference my plans for organization and administration of nutrition instruction in these schools, whereby the kitchen and dining room would exemplify the teachings given in the classroom. I was allowed five minutes and was the last speaker on the program. Since it was 6 p. m. and every one was tired, two minutes of the five were consumed in airing the room and moving around. Apparently, but three minutes remained in which to convey my message and to secure for it a receptive mental attitude. What really happened was that at the request of the conference, I spoke for fifteen minutes and then spent at least as many more in answering questions. Did not this show genuine interest — when the next move of the men was to the dinner tables?

The information given at this conference, carefully followed up by personal visits to the normal schools, has led to the appointment of trained nutrition workers in six of the state normal schools. Other schools would willingly have appointed nutrition instructors if I had given up my ideal of having the nutrition worker improve conditions in kitchen and dining room, plan properly balanced menus for all, and special menus for students suffering from malnutrition and obesity. Such innovations disrupt the administration now in force in kitchen and dining room and must necessarily be introduced gradually.

On another occasion a school superintendent of a city of 45,000 population wired me to come, saying he was ready to organize nutrition instruction in his schools and to appoint a nutrition supervisor. You can imagine the eagerness with which I responded to this summons, the first of its kind. I learned at the beginning of my interview with the superintendent that I had been called to approve the qualifications of the nutrition supervisor who had already been selected, in order that under Pennsylvania School Law, the School Board might be entitled to draw part of her salary from State funds. The qualifications of the candidate comprised two years nursing training in a school that is non-accredited and a three weeks course in nutrition. These did not entitle the candidate to State certification, and hence to State funds.

The superintendent, at first, failed to distinguish between the trained nurse and the trained nutrition worker but when he was enlightened on the subject he gladly accepted the standards set by the State.

These are but a few of the incidents that may be cited to show that in some respects there is more immediate need of training those who may employ nutrition workers than there is in training the workers themselves.

If some such organization as the American Child Hygiene Association would commission a person with a broad vision of health education to appear before the Superintendence Section of the National Education Association meeting in Cleveland, February 25, to present a health education program which would deal with all the phases of health, giving each its rightful place in the program, much good would be accomplished. Such a presentation would promote serious thought and would lead to a frank discussion, which should greatly advance the cause of health education.

## **THE PRE-SCHOOL CHILD**

**LAWRENCE T. ROYSTER, M. D., Norfolk, Presiding**



# WHAT NEEDS TO BE DONE FOR THE PRE-SCHOOL CHILD

RICHARD M. SMITH, M. D., Boston Mass.

The child of pre-school age no longer can be said to be neglected. It can more properly be said at the present time that interest in the pre-school child is greater than our knowledge of what ought to be done. Infant welfare work has been going on for a sufficiently long time, so that the best methods of care for the well baby have been established and the community resources organized to meet the needs. The same is true to a somewhat lesser degree with school hygiene. Work with the child between infancy and school age has been considered only recently and thus far no complete program has been provided and proved satisfactory by results. As physicians we know what is necessary to do for the child of pre-school age, but we do not know the best way to do it, and the community machinery has been developed only partially and in a few places. It has not yet become the custom to continue the well child under medical supervision, though this is recognized as necessary for the infant. No work with the pre-school child is possible until he is brought regularly to the physician for examination and advice. This is the starting point of all the work.

I want to outline briefly the things which need to be considered in taking care of the well child between infancy and the time that he enters school and to enumerate a few of the matters which need discussion in developing a community program.

I. The first thing demanding attention is nutrition. This is a fundamental consideration and the basis for normal development. There has been a good deal of discussion in medical and lay groups of "malnutrition." This has served to focus interest upon foods by calling attention to the number of children who have not been fed properly. We may learn much by a study of failures and by work with the under-nourished. But this is a small part of the program and does not prevent a repetition of the same condition in other children. There is not as yet perfect agreement as to the standards of measurement by which we can estimate malnutrition. An urgent need at the present time is the adoption of a uniform method of measuring bodily development. To this task we may well devote earnest effort. It is essential that we familiarize ourselves with the food requirements of normal

children of this age. The requirements not only in kind but in quantity as well. As soon as this is known our effort must be directed toward securing for every child this required food. We must go further and see to it that the child is taught proper dietary habits and that the mothers are told how to plan the meals and prepare the food economically and well. Nutrition of the normal child is the matter of first importance.

II. Closely related to nutrition is posture or bodily mechanics. As we study this question more closely we are convinced that posture bears a direct relation to proper physiological function and that for normal health it is essential that the bodily mechanics be properly adjusted. The abnormalities of posture for the most part begin to be manifest during the pre-school age and much can be done during this period to prevent their becoming established and to insure their early correction.

III. Intimately associated with nutrition also is the development of the teeth. We realize that the character of the second teeth is closely related to the nutrition during infancy and pre-school age. This furnishes an added reason for the necessity of satisfactory nutrition. We must also do what we can to preserve the first set of teeth. They should be kept clean and protected from caries. During the latter part of this age period much can be done to influence the formation of the jaw and to secure proper approximation.

IV. Physical development is materially retarded unless there is free nasal breathing. It is essential, therefore, if enlarged adenoids are present, that they should be removed. It is also desirable to do this in order that we may reduce the number of infections of the upper respiratory tract. These may result in infections of the ears with possible subsequent deafness or in enlarged cervical glands. The tonsils should be removed also when they are the seat of chronic infection. In the majority of instances it is wiser to postpone tonsillectomy until the latter end of the pre-school or the early part of the school period.

V. Infectious diseases are particularly fatal during the pre-school age. Ninety-seven per cent of the deaths from whooping cough occur in children under five years of age. Eighty per cent of the deaths from measles occur under three years of age. Sixty per cent of the deaths from diphtheria occur under five years of age and susceptibility to diphtheria is greatest during this period. From 15 to 20 per cent of all the deaths occurring in this age period are due to respiratory infections, for the most part pneumonia. The mortality from tuberculosis



is highest during the early years of life. We have, therefore, the definite responsibility of protecting children of this age, so far as we are able, from acquiring infections. We should avail ourselves of every specific protection which is of proved value. In this connection it is well to remember that the reason why smallpox appears so infrequently in our death returns is that there has been widespread vaccination. It behooves us to see that there is no relaxation in this procedure. By the Schick test and the immunization against diphtheria with toxin-anti-toxin we have a means at hand which it is not too much to hope may in the next few years place diphtheria in the category of rare diseases. Whatever means may be developed to prevent or to postpone whooping cough, measles, pneumonia, and tuberculosis should be used.

VI. Not only must we consider nutrition with its related conditions and the protection from disease, but we must so far as possible give attention to personal hygiene and the daily schedule of living. We should secure the proper care of the body—skin, eyes, ears, etc. Clothes should serve as a protection against cold, but must not be an impediment to the proper development of the body. Waists which are worn to support the lower garments may easily exert pressure on the tips of the shoulders instead of close to the neck and thus favor the development of faulty posture. Shoes may cause trouble with the feet which last a lifetime. It is essential that children have a maximum amount of fresh air and sunshine, and an adequate amount of exercise and sleep. Fatigue is one of the greatest deterrents to normal development and lowers the resistance to disease.

VII. Mental development takes place most rapidly at this age period. Habits become fixed which influence future character and health. We are only just beginning to understand something of the mental life of the child, but everything we have learned shows the great importance of these early years. It is essential that good habits be established. This is the age for mental hygiene.

These then are the things toward which we must direct our attention:

Nutrition.

Posture.

Teeth.

Conditions of the naso-pharynx.

Protection from disease.

Personal hygiene.

Habits.

How this program shall be put into operation in the community presents at once a number of perplexing features. I should like to enumerate a few of the more outstanding matters.

1. We must continue our education of the medical profession until it takes an interest in the normal child, as it has become interested in the normal infant. This should extend also to the dental profession.

2. We must introduce into the course of training given to field workers in child hygiene, nurses, nutrition experts and all others, instruction concerning the normal child of pre-school age.

3. We must study the proper organization of clinics for children of pre-school age and the constantly increasing number of special classes. From these clinics the home visiting takes place.

4. We must work out the proper relations and responsibilities of the various workers in this field; nurses, dietitians, dental hygienists, and special workers in mental hygiene, posture, etc.

5. We must correlate or consolidate different organizations and associations which are working with children of this age in order that a complete health program may be developed without duplication and overlapping. These groups include the infant welfare associations, the visiting nursing associations, the day-nurseries, the nursery schools, the kindergartens and also the public school workers who are interested that the children arrive at school in the best physical and mental condition.

6. We must encourage and assist boards of health and others to extend the general application of known protective measures for the eradication of infectious disease.

7. We must conduct a general educational campaign among the laity in order that there may be community backing to bring the children under supervision and to secure financial support.

# METHODS OF WORK WITH THE PRE-SCHOOL CHILD IN THE CITY

A. G. SCHLINK, M. D., Cleveland

Child welfare work can be conveniently divided into epochs from time of conception to adolescence, with the resultant classification of pre-natal, infancy, pre-school, and school age. The age of infancy was the first to be given consideration when vital statistics, with the appalling death rate of the new born, stirred all health and social organizations to activity, with the resultant development of babies' dispensaries and health centers throughout the country.

Very soon this study and work led to the conclusion that the unborn child was a great factor in infant welfare work and we necessarily saw the development of the pre-natal clinic, still not widely developed but being added to every child welfare program. Contagious diseases, the great factor in school absence of children, was the beginning of school inspection staffs of our large cities, but having gone far beyond that goal, we now see the wonderful organizations of school medical work, even down to the little red brick schoolhouse in the most inaccessible rural district.

School medical examination statistics, showing the high percentage of defects, physical, mental and moral, even in the first years of school life, have led us to the consideration of the pre-school child, and I believe we stand on the threshold of the greatest scientific effort in child welfare work, "The Pre-School Age."

One glance at vital statistics issued by the Federal Government in 1919 shows total number of deaths 1,096,436, of which 229,813 were under five years of age, while 68,192 was the total from one to five years, or pre-school age. In reviewing the causes of these deaths the following figures are interesting:

Tuberculosis . . . . .	5,830
Measles . . . . .	2,516
Whooping cough . . . . .	4,471
Diphtheria . . . . .	7,029
Influenza . . . . .	17,249
Gastro intestinal diseases . . . . .	3,249

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We must conclude that such evidence makes the pre-school child, the so-called "neglected age," most worthy of our earnest efforts.

The scheme of operation in welfare work for the pre-school child, whether rich or poor, must take in the main characteristics of the child, biological, psychological, and social. These are not dissociated in the organism, but are interwoven so that to consider any one, or to treat him in any way requires consideration of the entire child. The future will stress, not merely the physical phase of childhood, but also the mental and moral factors, and will not omit to give adequate attention to the problem of social adjustments, out of which arise the dominating influences of character formation. All organized welfare work should be on the basis of preventive medicine, recognizing the child as an individual, but associated with the family setting. His physical, mental, and social development depend more upon his environment than upon heredity, and for this reason guidance and supervision in the home are most important.

Taking this as a standard for our work and devising a scheme of application, brings us to the necessity of certain grouping of the city child according to his social standing.

- Group 1 — Child with both parents missing, necessitating full twenty-four-hour organization care;
- Group 2 — Child with one parent missing, needing day care by some organization or individual;
- Group 3 — Child in the large family, with father and mother living, but with budget hardly adequate for housing and food;
- Group 4 — Child of the so-called "Middle Class";
- Group 5 — Child of the "Well-to-do" family.

Under Group 1 would come the child cared for in asylum homes or institutions, and exceptionally in the individual boarding home. In the past we have had the institutional child, with the sad and dull expressionless face, anemic, undernourished, with glaring physical defects, and we are slowly awakening to the fact that the orphan child is our most unobstructed field for intensive child welfare work. These institutions should be manned by superintendents and workers with training in child work, and have requirements of physical and mental examinations with periodic re-examinations, and correction of defects

to meet the most rigid standards. Well kept physical records and weight charts, backed by intensive nutritional supervision, would be invaluable in our effort at standardization of health work.

In Group 2 we have the child with only one parent, who by necessity is forced to work and must place the child in a day nursery for the hours of work, or board the child in the pay boarding home. If this parent is the mother, I believe the ideal is the nursery plan, allowing that mother the pleasure of family cares in her hours at home. The day nursery as a child welfare institution well deserved its inferior position of a few years ago, when the child was haphazardly fed and occasionally washed, awaiting the return of the mother from her day's work. To-day the advantage of nursery care to the mother is of secondary importance, while the child, its health, happiness and education is the first consideration in the plan of work as followed by the Cleveland Day Nursery and Free Kindergarten Association. Under its supervision are five nurseries and two affiliated nurseries, with total enrollment of 365, and four kindergartens with an average enrollment of 200. Its central organization is made up of the usual officers and board of directors, with an executive secretary and medical director. The personnel of the individual nursery is: a chairman and her committee, superintendent and nurses. The policy is centralized control.

Admission to nursery is by personal application, or reference by any child helping agency. Social investigation is rigid, as the facilities are limited and only the most urgent cases accepted. Upon entrance to the nursery a complete physical examination of child, stripped, is made and complete record, with such recommendations for laboratory and further special examinations as are necessary. The parent is asked to sign a consent slip for smallpox vaccination, which is compulsory to admission, also a consent for further laboratory tests and correction of defects if recommended. All defects of eyes, ears, nose, throat, thyroid, heart, lungs. and orthopedic, with recommendations, are sent to the nearest hospital clinic. A copy of history and examination accompanies the patient to the hospital, where record of diagnosis and treatment is made and returned to nursery for completion of our files.

Dental work, which we consider of greatest importance, should be prophylactic and corrective. To preserve baby teeth is a guarantee of good permanent teeth and realizing its far-reaching effect, the organization began an intensive program of dental hygiene. A private dentist in his own office gives three hours, one morning, each week to exclusive

nursery work, and statistics show 100 per cent dental correction for 1921. It is timely that some scheme of centralized dental work be devised for cities, available to all agencies, adding another step to the elimination of duplicate effort.

Nutrition work, except for infants under twelve months, who are under direct Babies Dispensary supervision for feeding, has been under our direction. During the last three years all children have been weighed and measured every two weeks and a rather illustrative weight chart kept. Menus are regulated somewhat to meet the individual nationality in which the nursery is located, but all diets carry a large amount of milk, fruit, vegetables and cereal. If a child does not gain with the nursery diet supervision a very searching investigation in the home feeding is made, and usually the results are gratifying. In June of 1921 an opportunity was given us for two weeks of intensive work on our undernourished pre-school children. Forty children from two to six years old, showing malnutrition and under-weight but with all recommended physical defects corrected, were taken to a country camp under guidance of one of the nursery superintendents where regulation of diet, rest, and exercise were made rigid. All children were greatly benefited, with gains ranging from one-half pound to ten pounds. The happy result of this test has been the formulation of plans for a summer nursery camp on the shores of Lake Erie, site of which is already under control of the organization. We hope in the near future to record the progress of that venture.

The daily routine supervision in the nursery is under strict printed rules regulating baths, recreation, cleaning of teeth, use of nose drops, hours for meals, and rest periods, all children going to bed at least once each day.

Recreation and supervised play is a recent effort on the part of the nursery. At present all children over four years of age go to the nursery kindergartens, and this year supervised play for the children between two and four years will be tried with training school pupils working in the nursery.

Owing to limited financial resources and very limited working staff our efforts are mostly supervision, with practically all home work, follow-up work, and most corrective work being done by other child-caring organizations. Their whole-hearted cooperation has not only made the accomplishment of results possible, but instills an incentive to greater efforts.

This cooperation of all agencies doing child work being absolutely necessary to results, and to avoid frequent duplication of investigations, a better system of interchange or standardization of records is imperative. A standardization for social work similar to the uniform system of records used by hospitals under direction of the American College of Surgeons, or a method of borrowing records as devised by Dr. Richardson in Brooklyn Hospital, Child Hygiene Division, in some modified form, would go a great way in clearing up many problems now confronting organizations.

Although we may be enthusiastic about nursery work, there are children who will be better cared for under the boarding home plan. These homes must be under rigid supervision of some child agency, preferably the Child Hygiene Section of the City Health Department. Unless these homes are superior in their environment, and the child given the advantage of frequent medical attention, their existence is not justified.

Turning to Group 3, we find the child most sadly neglected, not only in the home but also in the present working scheme of our child welfare work. We may have theories but little has shown itself in practice. These little ones have been the prize infants, cared for and watched over by infant hygiene departments from birth to one year and then thrown upon the world. Six years later we see these little children enter first grade, showing probably late-developed rickets, spinal curvature, malnutrition, discharging ears, cervical adenitis, enlarged and diseased tonsils, many with teeth, even six-year molars, decayed, and possibly a hopelessly impaired heart or some lung impairment.

These are the pictures any further advancement in health plans should make impossible. The solution would probably lie in the extension of time limit to include pre-school age in infant welfare stations, according these children the frequent and careful physical examinations and nutritional advice given for infants, and with close cooperation of other agencies make possible corrective work. Here again some comprehensive interchange of records would be conducive to effective effort.

Nutrition classes, cardiac and pre-tubercular classes so highly developed by Emerson, Holt, and Richardson for the school child, should, if possible under modification, be extended to the pre-school age. The child being under the student period would necessitate the mother's interest in the instruction, a problem much harder of solution than we approach with the school child.

Clinics and classes will be successful only insofar as the medical personnel is interested in the work beyond financial returns. Richardson clearly points out that hospital dispensaries are only made interesting when the chief of the services is willing to cooperate and give men the chance to follow up cases, even if transferred to other departments. Ward visits and attendance at clinical meetings of visiting and resident staff would be the means to this end. The lack of interest on the part of the chief for the work of the men under him has impaired not only successful work in clinics and dispensaries, but the future of men who otherwise would have been a great asset to child welfare work.

Personnel and financial resources being very limited for the immense field of child work, social investigation must be rigid and painstaking, so that the most urgent cases be given all the advantage possible. Such investigation will be the only barrier to the unconscious drifting of our efforts into channels where others are to take up the work. This brings us to the consideration of Group 4—the large “Middle Class,” and it is here that we come in contact with the private physician who usually is a general practitioner but holds the strong position of family adviser.

Although the work in this group should be carried by the private physician, public health has a very definite task to perform, and that is education of the physician to the public. The education of the physician should begin in medical school, where a definite prescribed course in public and social service work should be given, and at graduation, besides the usual hospital internship, a chance of service in a prophylactic health center made possible. I do not feel that such service makes for a finished recognized pediatricist, but it does supply a great link in the general scheme of child welfare service.

Having the advantage of seeing the work from the standpoint of private physician, as well as public health service, I take this opportunity to urge upon this association the value of the private physician in public health endeavors. To gain this confidence and assistance there should be more discussion of public health problems and methods of work in general medical meetings and conventions, and the association of lay public health workers in these discussions would add greatly to their value.

Education of the public in problems of health of the pre-school child may have many angles, which time will not admit of discussion, but the publicity scheme of insurance companies requesting policy-



holders to have yearly physical examinations has a great deal of merit, justifying a similar request on our part to the mother with a child of pre-school age.

Passing on to Group 5—the child of the “Well-to-do” family amply cared for financially. Although records and investigations show many of these children with malnutrition and physical defects, I believe public health efforts under present financial stress, should be only educational, leaving the individual problem for the family to solve and correct with good medical advice.

### CONCLUSIONS

1. The necessity of pre-school age welfare being established, and the ground work of standard requirements fairly well outlined, the methods of administration remain the problem.

2. The institutional child, whether part or full time, can readily be given the advantage of rigid standards of health requirements.

3. The poor child with home environment at its lowest ebb is our greatest problem, and must be met squarely either by governmental or private agencies (welfare), in all its phases.

4. A closer cooperation of child health agencies from the standpoint of work and more complete records is of great need in the scheme of pre-school child welfare efforts.

5. The private physician must be recognized as the fundamental as well as the most important part of health machinery. Private practice and curative medicine must go hand in hand with all efforts at preventive medicine.

# METHODS OF WORK FOR THE PRE-SCHOOL CHILD IN THE COUNTRY

## Present Status of Rural Work for the Pre-School Child

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Work for the pre-school child is a recently developed phase of child health activities. Although it may sound like a developmental retardation, we have to admit that pre-school work is still in its infancy. With movements of this and similar natures, the city is the usual starting point and there is a gradual spread to the country, but this is perhaps less true of the pre-school movement, much of which has been started in rural areas. For example, there are in New York State 150 child hygiene stations outside of New York City. One hundred and seven are in cities and 43 in villages. Of these 116 are doing some form of pre-school work, a large part of which has followed rather than preceded the demonstration rural child health consultations which have been held in 47 of the 57 counties. Again, though work for the pre-school child in general was markedly stimulated in larger centers of population by the Children's Year Movement, at about the same time Cleveland started its motor consultations and the Federal Children's Bureau started its Child Welfare Special trucks for the examining of infants and pre-school children in rural communities. These appear to be among the first of organized agencies for work for the rural pre-school child. Most of the rural work has been patterned after the Children's Bureau traveling unit plan and carried on by State or municipal child hygiene agencies, or by private agencies, some of which now have well organized work of this nature.

## METHODS OF WORK

### *The Traveling Unit.*

The methods of this type of rural work are largely based upon a similar plan which is in fairly universal use, i. e., a traveling child health consultation. New York State organized work on this plan in May, 1920, by establishing traveling rural child health consultations and as I am more familiar with this particular piece of rural work than

with that in any other part of the United States, an attempt will be made to outline briefly the methods which we employ. This work has gone through various stages of evolution since its beginning, but during the past eight months, special effort has been directed toward every possible improvement in efficiency. It is not claimed that there has been evolved by any means the best method, but the one now in use at least seems to be working well in our rural communities. A description of the rural pre-school work in New York State follows:

The rural child health consultation is one phase of the work of the Division of Maternity, Infancy and Child Hygiene. Its purpose is:

1. To stimulate local interest and the establishment of permanent local agencies for the improvement of child health by:
  - a. Showing the need for periodic examinations of children.
  - b. Interesting local physicians, nurses, and dentists in preventive work among children.
  - c. Demonstrating the methods of conducting a children's health consultation.
2. To educate the public (particularly parents) in the hygiene of infants and children by:
  - a. Instructing parents in the importance and the methods of the establishment of proper health habits in early childhood.
  - b. Interesting children in the establishment of proper health habits.
  - c. Demonstrating adequate physical examination of children and the importance of its periodic repetition.
3. To make available to infants and children of pre-school age thorough physical examination with adequate follow-up and the correction of defects as early in life as possible.

#### PERSONNEL AND EQUIPMENT

The personnel of the rural child health consultation unit consists of two physicians, two nurses, one advance agent, and one chauffeur, the equipment of a complete clinic outfit, a seven-passenger touring car which carries the staff and outfit, and a small car for transportation of the advance agent. At times, when occasion demands, an obstetrician or a nutrition worker is added temporarily to the staff. In the months

when automobile travel is possible the staff and equipment travel by automobile to small towns away from railroads; in the winter they travel by train to larger towns of 2,000 to 5,000 population easily accessible by railroad. The use of the automobile saves traveling expenses and allows the staff to stay in reasonably comfortable quarters in larger towns from which they go out each day to the rural communities.

#### ADVANCE WORK

The choice of the towns entered rests primarily with the sanitary supervisors of the fifteen state districts. Each supervisor makes a request for the rural health consultations in his district and submits a list of the towns with an estimate of the number of children to be examined in each town.

At least two weeks previous to the consultation the advance agent visits each town chosen and after conference with the health officer and other interested citizens, he selects a committee of prominent local women who are interested in work for children and explains to them the plan of campaign. This committee divides the town into districts and each member, provided with appointment cards, canvasses her district for infants and pre-school children and makes appointment with the mother to bring them for examination at a definite hour on the days on which the consultations are to be held. The appointment method saves time for the mother and the nerves of the consultation staff by obviating the familiar long wait for examination and the crowded, noisy waiting-room. The advance agent also arranges for a place to hold the consultations (such as the town hall, the fire house, or a church or residence) and for accommodations for the staff; and attends to press notices, to publicity through the schools and pulpit, to window advertising and other methods of bringing to the attention of the public the fact that a children's health consultation is to be held in this town on a definite date. The sanitary supervisor visits the physicians in each town and explains to them the nature and method of the consultation work and tries to secure their interest and co-operation.

It is sometimes possible to obtain through the Division of Public Health Education the use of the healthmobile, which is a moving picture truck. In such instances the healthmobile travels in advance of the consultations and shows such films as "Our Children," "Jinks," "The

Knowing Nome," etc., and often a local speaker explains to the audience the opportunity offered by the children's consultations which are to follow.

### CONDUCT OF THE CONSULTATION

The consultation is conducted by two physicians and two nurses, each physician examining on the average twenty children a day from 9 a. m. to 5 p. m. During each examination every effort is made to teach the hygiene of infancy and childhood to the mothers. The physicians give special instruction to each mother concerning the individual points as they come up in the examination of the child. The nurses give general instruction in hygiene to mothers singly or in groups in addition to taking the history, weighing and measuring, testing eyes and ears and giving general assistance in the examinations. Through a nutrition expert recently added to our staff, the nurses are being taught to help the mothers in planning the diet of their children. An obstetrician or a nurse specially trained in prenatal work sometimes holds a mothers' meeting and gives a talk on maternity hygiene. Local committee women often assist in receiving mothers, bringing them to the consultation and in other ways such as providing equipment. In many instances they entertain the staff for lunch when the nearest restaurant is far away. The success of the consultation is largely dependent upon the interest and cooperation of these local committees.

One of the recent innovations in this work is a new record form devised for the purposes of completeness of examination, of quickness in recording findings, and of obtaining statistical data by means of punch cards without medical editing. Copy of the final form may be obtained by writing to the New York State Department of Health.

### FOLLOW-UP PLAN

At each examination the name and address of the family physician is recorded and the summary of physical defects and the recommendations copied from the record form are forwarded from the main office to the physician with the following letter:

Children for whom you are the attending physician were examined at the Children's Health Consultation recently conducted in your town. In this envelope we are enclosing copies of the reports of such examinations.

The defects found are brought to the attention of the mother at the time of the consultation. At that time, and later by letter (copy enclosed) the mother is advised to consult you regarding such care and treatment as, in your judgment,

is required. In conducting these Children's Health Consultations it is our aim and purpose to demonstrate the need for and the value of such periodic examinations with the hope that the work will be taken up and carried on locally. We further urge periodic examinations, made by the family physician, not only of the children but also of all other members of the household.

We take this means of assuring you of our sincere appreciation of your cooperation in this connection and trust that the results will be satisfactory to you and helpful to the families in your community.

At the same time a letter is sent to the mother urging her to consult her physician for the correction of the defects found in her child, informing her that her physician has a record of these defects and urging upon her the periodic examination of all of her family. At the end of about one month a summary of defects for each child and the name of the family physician are sent to the local nurse who is to do the follow-up work. If there is no local nurse, one is sent out from the State Department.

The nurses' form has a place for recording the results of the follow-up. She visits each physician to obtain a report upon his patients and offers to follow up his cases for him. In most instances this service is gladly accepted by the physician. The follow-up record is then turned in to the main office so that we have on file the record of examination of each child and a record of the follow-up. In a preliminary study made of 1,800 records we have found that nearly 1,500 children had approximately 4,500 defects of which more than 2,500 were corrected or under care and about 1,000 were not reported upon.

#### COST

A year ago the cost of these examinations was estimated at \$5.00 per child. Since instituting some of the changes which have taken place in the last six months, particularly the two automobiles by which the staff and advance agent travel, and two examiners instead of one, as well as various items in the equipment such as using paper sheets and napkins wherever possible instead of cloth, it has been found that the cost has decreased to \$1.50 to \$2.00 per child.

#### RESULTS

It is not possible to measure the results of this work but it has been found that the purposes for which these consultations are held have in some measure been attained. Following in the wake of the

consultations eighty-four independent consultations have been held in various parts of the State and thirty-three permanent child hygiene stations have been established and sixty-two stations already established have introduced pre-school work. From some sources reports have come that the children entering school in the districts in which consultations were held were found to have fewer defects than ever before. How much has been accomplished by interesting physicians in periodic examinations and nurses in correction of defects; educating children in health habits and mothers in child hygiene is impossible to estimate but reports reach us from the local physicians that their practices markedly increase after a consultation.

One unsatisfactory part of the results of these consultations is that unless sufficient local interest is aroused they are not repeated. Our next step will be to repeat these examinations and the follow-up at regular intervals in certain selected areas, making a more complete study of the value of periodic examination of the rural pre-school child.

#### OTHER METHODS OF RURAL PRE-SCHOOL WORK

The traveling rural health consultation is not the only method of doing rural work, nor is it permanent nor practical for all communities. In several progressive villages child hygiene stations similar to those of cities are on a working basis. The problem of the care of the pre-school child in small towns unable to support a child hygiene station is, however, one which has to be met. In some instances the station in a nearby large center is prevailed upon to receive the children from the rural areas, but there are many rural areas too far from the larger centers to make this everywhere practicable. In the rural areas of one county where the Division of Maternity, Infancy and Child Hygiene is organizing child hygiene work, the plan is being tried of providing a room and very simple equipment to be used for a child hygiene station in each of several villages selected with a view to accessibility of neighboring hamlets, and of having a local physician, with the county child health nurse, hold children's health consultations at six month intervals in each station. In the interim the county nurse is to make regular rounds of these stations at stated intervals for the instruction of mothers and the supervision of the children. A similar plan is to be undertaken in another county this month. The details of this method and its success or failure will be told in the future.

## CONCLUSIONS

Rural work for the pre-school child is a most important part of public health work. It is new; it is expensive; it needs standardization. It offers a fertile undeveloped field for study and effort toward the goal of perfection of methods. When this goal is reached it will undoubtedly point the way to valuable methods of rural work for rural infants and prospective mothers as well as for the rural pre-school child.

## DISCUSSION

Miss Frances Colbourne, Executive Secretary of the Philadelphia Association of Day Nurseries: I was asked to discuss the possibilities of the Day Nursery. I would like to start out by saying that I think they are boundless — but the time for discussion is limited. As my contribution, I thought you might be interested in having actual figures of what has been found in day nurseries.

I was particularly interested in the plea of one speaker for broader vision on the part of the private doctor, and the hope expressed that he may become more interested in public health. We find that his attitude makes all the difference in the world. I have been making, recently, a study of some nurseries where we found very different results after a change in a doctor from one who gave casual supervision, when requested, to one who made complete examination of each child at time of entry.

Out of fifty-three children thus examined in one nursery, only ten were marked as O.K. by the second doctor. Twenty-three (43 per cent) had enlarged tonsils; eleven enlarged cervical glands; fourteen (26 per cent) showed teeth needing attention; four needed treatment for eyes — this included two with gonorrheal infection; four needed treatment for the ears; four were marked nervous; three needed orthopedic care and six were badly undernourished. As a matter of fact, fourteen needed extra feeding. The nutrition work in this nursery was taken over by the Interstate Dairy Council of Philadelphia and we have some very interesting results, with a jump from 36 per cent to 78 per cent average weight in three months. I should like to emphasize that all these statistics are from a nursery where the Board believed they had been having good medical care.

In two other nurseries for the colored, where there had been practically no medical supervision, this is what we found when we got a first class colored doctor to make a complete examination. Out of a total of eighty-one children, nine (11 per cent) were marked O.K. Twenty-two (27 per cent) needed adenoids and tonsils removed, twenty-one (26 per cent) had enlarged tonsils which needed watching — making 53 per cent needing attention in this group alone. Twenty-three, or 28 per cent, needed dental work; eleven needed a tooth brush and to be taught to clean their teeth. Forty per cent were under-nourished, and of that number four had rickets. Other figures are eleven (13.6 per cent) circumcision advised; six (7 per cent) umbilical hernia; four (4.9 per cent) orthopedic defect;



four slight heart defects; three, predisposed to lung trouble. In five (6 per cent) a Wassermann test was advised. These are figures for colored children. I would like to hear some discussion as to care for the colored children in other cities; in Philadelphia, for instance, we have no convalescent home where a mother and child can be received.

The mere finding of defects is, of course, valueless unless they are followed up by proper medical care. It is the work of the Nursery Social Visitor to see that the doctor's recommendations are carried out, through the use of clinics and hospitals. Hers to persuade and educate the ignorant mother, to arrange dates for operations after consent has been obtained, to secure convalescent care and insure proper food and hygiene in the home. A trained worker as Nursery Visitor is necessary to carry out this work and to do preventive work for the pre-school child.

In conclusion, I might add that in Philadelphia we have a special class in posture for the pre-school children, in the Preventive Department of the Children's Hospital. The children go down there and instruction is given them in the form of games. They learn eagerly, have a delightful time and are very enthusiastic.

**Dr. Edgar J. Huenekens, Director of Infant Work, Minneapolis Infant Welfare Society:** Dr. Smith has just shown us how complex is this subject of the needs of the pre-school child. It is too complex for the physician and the nurse and for the nutrition expert acting independently, though you might gather the contrary from the discussion this morning. We find in our work among pre-school children that our difficulty is not to convince the parent that the child needs a proper diet. The great difficulty is to get the parents to get the child to do it. We have time and time again given a complete diet list to the mother and she will then say, "How am I going to do it?" This applies both to the question of diet and the question of proper rest. Our pre-school section of the Minneapolis Infant Welfare Society works in conjunction with the students of the Home Economics Department of the Agricultural School of Minnesota. These students are actually sent into the homes and are given instruction how to change the home environment and teach the mother to train her child to sleep and teach it how to eat. In doing this work we are doing it in a limited fashion so to speak. There are comparatively few homes we can enter. We feel that the emotional environment and the proper training of the child is the real problem and should be attacked in a practical way. There are two ways of accomplishing the general education that this involves. An experimental course for teaching child psychology and child training at the University of Minnesota, is open to social workers, nurses and mothers. The other method is one now being tried out for the first time in a playlet given at the Minnesota State Fair. The pantomime acts show the right way and the wrong way to get a child to sleep, how to treat the child in a tantrum, the different methods of inducing it to eat, and a resume of a complete day of a child. This shows how the hours should be divided in regard to play, eating, sleeping, etc. We hope to improve this playlet and if we are successful in obtaining money to finance it, it could be expanded into a movie and presented all over the country. It seems to me the proper organization to finance such a proposition would be the American Child Hygiene Association.

Dr. John Sinclair, Philadelphia: I was very much interested in Dr. Smith's paper throughout and it was rather gratifying to me to find in his seven postulates are points covered by the hospital in Philadelphia except posture, and, although the doctor did not put it in that form, mental hygiene or mental habits.

The work that is especially interesting to us, because we have just completed the first six months of work in that connection, is with the teeth of children. We have had a dentist for perhaps over a year, but only for the past six months have we had a dental hygienist also, and I feel you may be interested in a few figures with regard to the work of that period. Of 332 children in the pre-school bureau—our work I may say is limited to the children of that period—the first interesting fact is that 54 of these children presented 96 fistulas; second, that 214 of them presented 1,306 cavities; in one instance a child presented 24 cavities. In addition to that we have had all these cavities corrected.

Dr. Charles J. Hastings, Medical Officer of Health, Department of Public Health, Toronto, Canada: I appreciate the privilege of being with this conference, which I have been denied for the last three years and I appreciate the importance of this subject, I think, as highly as any of you. It is a remarkable fact that it has been overlooked for as many years as it has, when you take into consideration what this neglect means and the number of defects that complete physical examinations have revealed, that is in the first year of school, and the number of defectives we know well should have been examined some three or four years before. Some of them, we regret to say, are irreparable by the time they reach school. I refer to defects which should have been removed in the pre-school age, such as adenoids, enlarged tonsils, and defects of the teeth. The use of the tooth brush should be taught and not only the use of the tooth brush but also a properly balanced diet and the proper kind of food are, in my judgment, of a good deal more importance than a tooth brush in developing the right kind of teeth in our children.

We have had a great deal of most valuable information from those high up and those in the biological and chemical field, who have devoted a great deal of time and given a great deal of thought as to what constitutes a balanced diet and the value of vitamins. It is a regrettable fact that the manufacturers of proprietary articles are always on the lookout for something to turn to commercial account and they have utilized the vitamins and have undertaken to prepare these vitamins in concentrated form. Now I don't think we can lay too much stress on that well demonstrated fact that an ample quantity of vitamins is supplied to us by nature and we should make sure our children are getting them. The one single article of food that is of more importance than any other, and we all agree on that, is milk, which contains all three of the vitamins in developing the child and therefore we should see that the children get a sufficient supply of milk. I should say that the child of pre-school age should drink a quart of milk every day and when this is assured, we will have a better lot of children entering our schools.

Then there is the economic side—the loss of time in entering school in connection with the care of the teeth and with the removal of tonsils and adenoids—

the amount of time that is lost, not so much in the individual child, but when the figures run up to fifty or a hundred thousand children, the question of time, to say nothing of the fact that it should have been done and we should have had these children under supervision earlier.

**Dr. Ada E. Schweitzer, Director of Child Hygiene Division, Board of Health, Indianapolis:** I have been greatly interested in this discussion. We find always that the needs of the pre-school child are manifold.

**Organization:** The presentation of the work in New York State by Dr. McKay suggests many helpful ideas to the child hygiene worker. In Indiana we too have a mobile unit. By this means we reach a large number of mothers, babies, and pre-school children. Instead of sending the mobile unit to isolated towns, it has been our custom to organize each county visited by townships, working through local agencies. Occasionally a young woman from the Child Hygiene Division is sent to assist with the organization and to give instructions. She remains only long enough to launch the work. The effectiveness of the organization in any case depends in a great measure upon the efficiency of the local workers and we find it a distinct advantage to leave in the field an organized group of workers who have been trained in our methods of work.

**Follow-up:** The physical examinations of children revealed the usual need for correction of defects and improvement in habits or diet.

The follow up work is carried on by local agencies, usually by public health nurses. The measure of good accomplished can not be known as yet. Each year we are making studies concerning the care and habits of mothers and children.

**Maternal Care:** In a study concerning prenatal care, we found that two-thirds of the mothers have had some degree of rest (two weeks to six months) prior to the birth of the child. We found also that 97.7 per cent employed a physician at the time of confinement instead of a midwife. Our midwife problem is not so great except in the larger cities. The majority of mothers spent the usual time of recuperation in bed after the baby was born. Seventy per cent reported good recovery and eighty-one per cent reported good health at the present time. These statistics were based on the record of 5,000 cases last year. The care given has not improved greatly in the last two years, but is much better than the care given five years ago. We found the studies of value in view of the present interest in maternal care.

**The Child:** In a study of the number of hours of sleep the child needs, as compared with the number of hours he actually gets, we found that two-thirds were not getting the required amount of sleep. Our nutrition study shows that over ten per cent of the children were more than ten per cent below weight for height. Only about six per cent of the children ranged below the standards given in our mental tests.

**Mrs. D. N. Crouse, Baby Welfare Committee, Utica, N. Y.:** There is a question I have asked myself many times of late and perhaps you can help to answer it, and that is, how can we workers in smaller cities best deal with the problem of

the pre-school child? This afternoon we have had a most excellent paper on work in large cities and a few about work in the country, but we need help with regard to the work in the small city. Our work in Utica was started in 1912 with one station. We now have four stations and employ seven nurses doing prenatal, infant, and pre-school work. The infant mortality rate has dropped from 158 in 1911 to 82 in 1920. The pre-school work is only two years old and we feel our inexperience very deeply. You will probably remember that last year an excellent plan was given for pre-school work, but, unfortunately, the standard is so far above the reach of organizations in the smaller cities that we hardly know how to go to work and handle this problem. We have visited the clinics in New York and in Boston and are greatly impressed with the thorough way in which the work is done, but when we come back to our home field, we see how impossible it is for us to carry out the work in such detail. We have not the accessories you have in the larger cities. The first problem we met, of course, was getting hold of the pre-school child. Dr. Smith has touched upon that and we were confronted with it. I think our feeling was illustrated by an experience that came to me this summer. I was visiting a home where the idol of the house was a little girl only five years old. She was greatly interested in the subject of weddings because a maid who had been in the home for many years was going to be married in the fall and she came to me one day and said, "Will you give me your wedding ring?" Of course, I told her I thought too much of my wedding ring to give it to anybody and asked why she wanted it. "Because I am so afraid I won't have any wedding ring." I explained to her that at the time of the wedding the husband bought the wedding ring and gave it to the bride. She was very quiet and then looked up at me with big serious eyes and said "How do you go to work to get a husband?" How to go to work and get the pre-school child we have solved to a certain extent; as we now have an active enrollment of over 600, we would like to know how best to deal with these children. We have always the vision, of course, of your high standard, but we need helpful suggestions as how to reach that standard. Our city is largely a manufacturing city, and, consequently, there are a great number of foreigners. Last winter we interested some of the better educated of these foreigners to give little talks in their native language to the foreign mothers who spoke little or no English. The material for these talks is furnished by our Medical Adviser. It is easy enough to interest a mother in the proper feeding of her baby but it is difficult to teach her the necessity for proper supervision of the diet of a child over two years of age. One difficulty we encounter is the scarcity of nurses who are trained in nutrition work according to present day standards. We have come here hoping that we will gain a great deal from this conference which will help us to carry on our work more efficiently.

Mr. George R. Bedinger, Red Cross, New York: I just want to say one word on the subject of the pre-school child. The New York County Chapter of the Red Cross in New York City was fortunate enough to be engaged in a large demonstration, covering Dr. Smith's seven points, and particularly the mental condition of the pre-school child. Not long ago four organizations were brought

together in New York City to work out a plan to prepare the children of kindergarten age to be ready to enter school with most of their physical defects removed. In June 1921 about 1,200 children of kindergarten age who would enter the first grade by fall were gathered together in eight public schools by the Department of Education. Wherever possible they were brought together with their mothers. The Department of Education having brought the children, and they did it very well, the Department of Health physicians saw these children, and gave them physical examinations and tabulated the results. The American Red Cross provided a dental hygienist to clean the teeth of these children during the summer and a follow-up Red Cross nurse to visit them during the months of July and August, and so far as possible to get their physical defects removed or corrected. In addition the New York Society of Consulting Psychologists provided volunteer psychologists to give mental examinations to these children. That is the point I want particularly to bring to your attention. I think that you all know how difficult it is to work with the child of pre-school age. I think in New York we were quite startled to realize the difference in mental age of all of those who were practically of the same chronological age. Of these 1,200 children we found the mental age ranged from below three to over seven, yet they were all five or six years of age chronologically. I think that shows how increasingly difficult this problem is when you really get down to it carefully. I may say in passing that the results of that demonstration have been prepared in a pamphlet which you can obtain by writing to the Director of Health Service of the New York County Chapter of the American Red Cross, 598 Madison Avenue, New York City.

**Dr. Louis A. Waldron, Bureau of Child Hygiene, Department of Health, Yonkers, N. Y.:** I would like to get a few statistics here if the president will permit. How many cities having pre-school work have their nurses doing pre-school work and welfare work? Answer by hands, four. How many cities having nurses for the pre-school work who are not doing infant work? Answer by hands, five. How many have the same clinic for pre-school children and infants? Answer by hands, ten. Those who have them and have separate clinics? Answer by hands, seven. How many having a pre-school clinic pay a physician to attend the clinic? Answer by hands, fifteen. How many get free service? Answer by hands, fifteen.

**Dr. W. N. Bradley, Star Center, Philadelphia:** I have tried very hard to refrain from saying anything but the remark of the doctor from New York makes it almost impossible for me to remain silent. I believe that this matter of the pre-school child is of so great importance to the State, that the day should come quickly when the State by legislation, shall require all children of the age of five years to be registered during their last pre-school year, between five and six years; that the child shall receive proper examinations for imperfections corrected before the child enters school. This is to be made of record and the record to go with the child when it is registered as a pupil.

Dr. Ralph E. Barnes, Director, Maryland Tuberculosis Association. Baltimore: There are very few things I want to say. I am particularly interested in this rural problem, particularly at this time, and what impresses me most is the practical part of the subject. In regard to educating physicians I am going to say we are going to have to educate our rural physicians. I want to say I have a real busy time in regard to physicians. Now, I believe your clinics, your mobile clinics, and various things, are excellent, but I want to say if you don't hold post-graduate clinics in your counties for physicians, the work is practically worthless. In regard to that five year age for registration, I want to say I think it is entirely too late. I would make it two or three.

Dr. Royster: Will you just permit the chair itself to say a word? It is not customary to speak from the chair. Dr. Smith asked me before the meeting if I would speak on the care of the pre-school age with relation to the child in institutions and then apparently, for some reason, switched me off that and practically forbade me to read any notes on that subject.

I only want to invite your attention to one or two things. A very large proportion of children in this country of pre-school age are in institutions. That has been mentioned by one of the speakers this morning. The same rules should apply as apply to the child in private life as far as physical examinations are concerned. I want to say that institutions for the care of the child are also child-placing institutions and therefore have a double responsibility. It rests on those in authority to first see that the child itself is placed in the proper environment in the home. The second is as to the home, to see that the proper child is placed in that home. That means a child of physical well-being in every respect; it means a child free from venereal disease, either acquired or inherited; it means that the child must have as far as possible negative tests for gonorrhea and syphilis before being placed in any home. A homeless child for a childless home. They must see that no children of opposite sex, unrelated and of the same age are placed together, as too many instances have occurred subsequently, when these children are 15 or 16 or 17, foster brother and sister. I am speaking from experience in placing children for 18 years.

The next thing no child should be placed in a private home unless reasonably sure the child is mentally sound. I say reasonably sure, because I know how difficult it is to say absolutely. When a child reaches the age of 15 or 16 months you can be reasonably sure. Any child under 15 months of age is far better off in a foster home than it is in any institution but also we know at that age it is extremely difficult to tell if it is mentally sound. Of course, in cases of other injuries and mental defects, border-line cases are exceedingly difficult to know and too few of us know how to test those. Also in our experience we have found a child adopted during the first six or seven months of life has frequently been returned to us at the age of eight or ten years after the child has twined itself around the hearts of the foster parents, only to be told "Our child does not keep up." It is a serious problem not only on the part of those in authority but on the part of those in this association.

Just one more thing. I was on a children's court commission in Virginia last year. I hope it will never be my mission to serve on another court commission where we have to go against legislation. There arose a dispute as to whether sectarian institutions should be under the supervision of the state body. I want to say that there is no more reason why a sectarian institution should not be under state authority and supervision of public health and child welfare than one that is public, and we finally got that through our way. After it has been passed by appealing to one of the very sectarians who had opposed it, we went before them and had it changed.

Now one more thing. I want to make one appeal. This comes strictly in the child of pre-school age although it is hardly considered in children of school age. We have heard a good deal about mental disease. The integrity of the foundation of the public school system in this country depends upon the attention we pay to the mental efficiency of each child. Without that the public school system of a certainty must fall flat. Let this organization go on record recommending that children be admitted to public school or any other school, only after a test of mental age and not according to chronological age.

**Mr. Bailey B. Burritt, New York City:** I feel that Dr. Smith's admirable discussion considered every point of view except one — how we are going to get the child or mother to come to the clinic. We have already much experience showing the possibility of getting the pre-school child. Dr. McKay has told us how it can be done. We have a number of instances in New York illustrating the possibility of securing the pre-school child by combining with school authorities in endeavoring to have each child come to school the first time only after the child has had an examination and its parents have been advised with regard to defects found. In the Italian district in New York in which our Mulberry Health Center is operating we have established clinics for the examination of normal pre-school children and visiting nurses and dietitians through their contacts with the homes get the children to these clinics. Over 1,000 pre-school children were examined in these clinics last year out of about 4,000 children in the neighborhood between the ages of two and six years.

There are about 1,000 births each year and our program has been under way a little over three years. We are able to follow the children through each year by means of a medical examination. We are able thus far to examine about one-fourth of the pre-school children. It seems to me that is one possible way of getting the children. It is not impossible. Their parents can be interested. It is a matter of education as to the importance of pre-school work. I believe you can educate them, but it does cost. Until we realize we have to pay for it we cannot expect to get real pre-school work in our communities.

**Mrs. Hathaway, National Committee for the Prevention of Blindness, New York City:** I also found one omission in Dr. Smith's very clear paper — the eyes of the pre-school child. Last year I made a plea to this conference that the nurseries pay attention to the eyes of the children under their care. It was very

encouraging, therefore, to hear in the report on nurseries that special attention is being given not only to eye conditions, but to the causes back of them.

An examination, physical and mental, was recently made of a group of pre-school children, but when the report was issued, there were no statistics on the eyes. When I made an inquiry concerning this omission, I was told that examination of eyes by one qualified to make such was altogether too expensive a proposition; but at the same time the city was carrying in the schools 25,000 repeaters, who were repeating, according to the supervising oculist, because they had eye trouble. I do not know the exact annual cost of educating a child in this city, but even if it were put at the minimum, the amount would more than cover the most expert eye examination not only of the 25,000 repeaters, but of the pre-school children as well.

The result of this lack of examination of the eyes of children entering school is that minor defects and diseases that might so easily be corrected if taken in time are aggravated by school conditions.

I want to make two pleas: first, that we do examine the eyes of children of pre-school age, so that they may be fit to go to school; second, that the school conditions be made fit for the child, so that the effort of early examination may not be wasted.

Miss Mary Gardner, District Nursing Association, Providence, R. I.: I would like to ask whether we in Providence are alone in finding that the economic question enters largely into the health of the pre-school child. It is perfectly simple to have a child examined; it is not difficult to have him operated upon particularly for adenoids or tonsils; free dental work can be obtained, but there is still the question of the ability of the average poor family to supply enough for that child to eat. Our great difficulty in dealing with the 2,500 or 3,000 children we carry is the question of his every day diet, the question of its sufficiency.

Mrs. H. W. Farnam, New Haven, Conn.: I have just a very short word to say. In Belgium after the war we were wondering how to get the children and interest the women so we started what we called "des Cercles d'Etudes," or in English "Study Clubs." We tried to get all the mothers to come to the meetings where doctors and nurses gave lectures and the women themselves were encouraged to talk about how to take care of children, thus creating a certain cooperation between the physicians and nurses and the mothers. This I think is a rather good way to do it.

Dr. W. J. French, State Child Welfare Commission, Wilmington, Del.: I think we are wandering a good deal and trying to teach old dogs new tricks and I don't believe it can be done. We can make a little progress with the methods but the whole thing is really a matter of education. We have to start in and educate the coming physicians or we are never going to get very far with our pre-school work. It is all very well to bring traveling educational units into the state for the benefit of the men already there, but we are most concerned with the man who is in school



or the man who is to be. It is all very well to say that these things are fundamental in our problem of child care, that this is basic and that is fundamental and of sufficient interest to the state to take it over, as states are doing; we must go further and see that there is some way to teach the coming doctor. Why wait until he gets out and then send him to a unit to try and teach him something? Why not teach him in school? We must start in with the younger generation, with the high school. There we have students beginning to wake up, their minds are in the formative period and they are beginning to think. In the Women's College of the University of Delaware, and which is really the State Normal School, there are 210 young women students. Every single one of those young women ought to have instruction in child care. We are trying to get something of that kind started. We made a beginning this year. Now when you begin the attack absolutely at the roots by teaching new ideas and methods we will begin to make some progress.

**Dr. McKay:** I quite agree with Dr. French and the gentleman from Baltimore, that the education of physicians is a very important subject. I wanted to say we make a special effort to that end in the work we are doing. We try to get the local doctors out to our consultations.

**Dr. Royster:** Dr. Smith will close the discussion.

**Dr. Smith:** I do not think that I want to say anything further except to urge again the necessity of settling the many uncertain points which have been presented. I wish that Dr. Walton had continued to ask questions. His questions are just the ones we should like to have answered.



**INFANT MORTALITY IN THE FIRST MONTH OF LIFE**

**Special Session for Directors of State and City Divisions of Child  
Hygiene**

**MERRILL E. CHAMPION, M. D., Director, Division of Hygiene, Massachusetts  
Department of Health, Boston, Presiding**



## THE MORTALITY OF EARLY INFANCY

LOUIS I. DUBLIN, Ph. D., Statistician, Metropolitan Life Insurance Company,  
New York

The last twenty years and, more especially, the last ten, have witnessed remarkable advances in the conservation of infant life. At the beginning of the century, there was a lavish waste of babies; infant deaths under one year of age in most localities ranged from 15 to 20 per cent of the live births. At the present time there are few cities of any size, or states, where the rate is above 10 per cent, and a large number of localities have infant mortality rates below 8 per cent. In fact, a large part of the improvement in the general death rate in American communities has been accomplished through the control of infant mortality. It is fair to say that there has been a reduction of 50 per cent in infant mortality during the past two decades. In 1921 the rate for the Birth Registration Area of the United States was 76 deaths per 1,000 live births. In the same year the rate was 77.9 in a group of 573 of the larger cities of the country canvassed by Dr. Philip Van Ingen for the American Child Hygiene Association. Relatively few years ago infant mortality rates of 150 and over were the rule; last year only eight cities in the list of 573 showed rates of 150 or over.

It is a matter of common knowledge, however, that this improvement has been accomplished largely through the control of the mortality of infants from such causes as diarrhea and enteritis and, to a lesser degree, from the respiratory and other infectious diseases. Infant welfare work in recent years has been virtually synonymous with better baby feeding. On the other hand, little or no progress has been made in the reduction of a third, and undoubtedly the most important, group of causes of infant mortality. These are generally designated as developmental in character and the deaths from them are confined almost entirely to the first month of life. *Early* infant mortality, that is, the mortality of infants under one month, has remained virtually stationary during the same period that astounding advances were made in the control of the other causes of infant mortality, and that in spite of the lavish expenditure of money and energy in the field of infant welfare and child and maternal hygiene. This phase of health work is, from the point of view of accomplishment, almost where it was twenty years ago.

The losses from early infant mortality are so large as to justify the keenest interest not only on the part of members of this association but of all engaged in public health work. There are born alive each year in the United States approximately 2,620,000 babies. Of this number about 7.6 per cent, or 199,200, die before they are a year old. Early infant mortality accounts for about 109,000 of these deaths. These deaths are, for the most part, due to the following conditions: malformations, prematurity, congenital debility, syphilis, and injuries at birth.

To this number must be added an almost equal number of foetal deaths at or near full term, which properly belong to this group. These are the stillbirths, which also number about one hundred thousand. It is most unfortunate that our vital statistics have, to date, consistently overlooked the stillbirths. We have concentrated on the registration of live births and on the deaths of live-born children and, in our zeal, we have overlooked the stillbirths almost entirely. We have not only been lukewarm in our insistence on the registration of these stillbirths but have all but forgotten to consider them as deaths. We should at the outset realize that from the point of view of numbers the stillbirths present a problem of the first importance in the field of infant mortality. These stillbirths are in every essential respect as worthy of consideration as are the deaths of live-born children within the first month of life. Much the same factors are involved in their causation and, as we shall see later, the same efforts which are successful in preventing early infant mortality are almost to an equal extent successful in preventing stillbirth. The stillbirths and the early infant deaths together account for a loss of more than 200,000 children in the United States, and this, it will be admitted, is worthy of the attention of the American public health movement. In fact, from the point of view of numbers involved and the promise which is held out to intelligent effort, there is no field of public health work which so much deserves immediate and concentrated effort. These deaths in number exceed those from tuberculosis and from all of the infectious diseases combined, except influenza and pneumonia. This is the field *par excellence* of the health officer for the next decade.

Early infant mortality has not as yet responded to generalized public health work. This is true not only in America, but almost universally. Even in Australia and in New Zealand, where infant mortality rates have been consistently reduced to the lowest figures on

record, early infant mortality remains much where it was ten, and even twenty, years ago. Thus, in 1920 in Australia, the early infant mortality rate was 31.8 per 1,000 live births; in 1911 the rate was 31.1. In New Zealand in 1920, the rate was 30.8 per 1,000 live births; in 1910 it was 30.2. In the Birth Registration Area of the United States in 1920, the rate was 41.5; in 1916 it was 44.0. Unlike the total infant mortality, which is considerably higher in cities than in the country, early infant mortality is only slightly lower in the country districts than in the cities. Thus, in 1920, the cities in the Registration Area gave an early infant mortality rate of 42.6; the rural part of the Registration Area, a rate of 40.4. Similarly small differences are shown in a comparison of the urban and rural rates in the individual states.

Much capital has been made of this point as well as of the slight improvement in the rate of early infant mortality during the past decade. It has been supposed that early infant mortality is little influenced by environmental factors. These deaths have been assumed to be beyond control. To quote the views of recent British writers:

The great bulk of these deaths are due to some obscure internal derangement of normal processes in the mother or infant which are either independent of the external environment or are due to some factor or factors in the external environment equally common among all classes and under all circumstances. It would appear that the structural or physiological defects leading to these deaths \* \* \* do not characterize any particular class or environment and do not appear to have any recognizable relation to external conditions. We can write off a small proportion of these deaths in large towns as due to syphilis, but we know that this is an unappreciable cause of prematurity in country districts. A few others are due to acute illness or accidents to the mother; but of by far the greatest number of deaths from developmental conditions we do not know the cause, and we do not know how to prevent this mortality. Just as in every packet of seeds there are some that do not germinate, and in the young of every flock there are some that do not survive, so it may be suggested that these deaths represent Nature's failures, and man with his present knowledge cannot hope to prevent this loss. The deaths from developmental conditions in the first month appear to range from 25 to 30 per 1,000 births, and this probably represents the real natural death rate \* \* \*. We see here natural selection in operation, uncontrolled and uninfluenced by man's efforts, steadily eliminating the unfit, and we realize how shallow is the argument sometimes brought forward that by preventing infant deaths we are in the long run injuring the natural physique by interfering with natural processes.<sup>1</sup>

<sup>1</sup> "Mortalities of Birth, Infancy and Childhood," Medical Research Committee in connection with National Health Insurance, Special Report Series 10, pages 25-26, London, 1917.

I purpose in the following study to show that this interpretation of the facts is in all probability false.

Our line of attack has been first, to determine whether the early infant mortality rate is in fact fairly constant and not subject to considerable variation. If constant, as it has been assumed to be for every economic strata of the population, for rural and urban territories, for various cities geographically widely distributed, there would be some ground for the belief that we were concerned with a condition of the type assumed by the British authors referred to. For this purpose, we have as a first step, tabulated the infant mortality under one month and for the remaining eleven months in a group of 47 unselected but large American cities, in the U. S. Birth Registration Area for 1920.

Infant Mortality Rates in American Cities in Birth Registration Area States, 1920

CITY	DEATHS PER 1,000†			CITY	DEATHS PER 1,000†		
	Total under 1 yr.	Under 1 mo.	Over 1 mo.		Total under 1 yr.	Under 1 mo.	Over 1 mo.
Los Angeles, Calif. ....	71.3	35.7	37.0	Albany, N. Y. . . . .	76.9	44.1	35.3
Oakland, Calif. ....	70.7	33.6	38.5	Buffalo, N. Y. . . . .	102.9	50.2	55.5
San Francisco, Calif. . . .	61.8	33.9	28.9	New York, N. Y. . . . .	85.2	35.0	52.0
Bridgeport, Conn. . . . .	91.9	44.5	49.6	Rochester, N. Y. . . . .	84.4	47.2	39.1
Hartford, Conn. . . . .	98.7	53.4	47.9	Syracuse, N. Y. . . . .	104.7	49.2	58.3
New Haven, Conn. . . . .	87.0	37.6	51.4	Yonkers, N. Y. . . . .	88.6	43.9	46.8
Washington, D. C. . . . .	91.0	47.7	45.5	Akron, Ohio . . . . .	83.8	45.2	40.4
Indianapolis, Ind. . . . .	91.0	47.9	45.2	Cincinnati, Ohio . . . . .	82.4	39.9	44.2
Kansas City, Kan. . . . .	107.7	45.2	65.5	Cleveland, Ohio . . . . .	87.3	41.1	48.2
Louisville, Ky. . . . .	86.5	41.6	46.8	Columbus, Ohio . . . . .	96.4	45.7	53.1
Baltimore, Md. . . . .	105.9	44.4	64.3	Dayton, Ohio . . . . .	84.7	45.3	41.3
Boston, Mass. . . . .	100.6	45.6	57.7	Toledo, Ohio . . . . .	88.6	43.1	47.6
Cambridge, Mass. . . . .	95.9	44.5	53.9	Youngstown, Ohio. . . . .	94.8	41.7	55.4
Fall River, Mass. . . . .	129.5	47.2	86.4	Portland, Ore. . . . .	59.6	38.3	22.2
Lowell, Mass. . . . .	134.7	53.9	85.5	Philadelphia, Pa. . . . .	90.6	35.8	56.9
New Bedford, Mass. . . . .	122.3	40.2	85.6	Pittsburgh, Pa. . . . .	111.3	49.0	65.6
Springfield, Mass. . . . .	84.8	46.2	40.5	Reading, Pa. . . . .	99.3	49.7	52.3
Worcester, Mass. . . . .	85.3	43.7	43.5	Scranton, Pa. . . . .	119.0	53.8	60.0
Detroit, Mich. . . . .	104.2	50.7	56.3	Salt Lake City, Utah. . . . .	72.5	37.9	35.9
Grand Rapids, Mich. . . . .	99.1	47.6	54.0	Norfolk, Va. . . . .	99.6	47.2	55.0
Minneapolis, Minn. . . . .	65.3	41.3	25.1	Richmond, Va. . . . .	114.1	45.5	71.9
St. Paul, Minn. . . . .	73.0	46.4	28.0	Seattle, Wash. . . . .	56.6	35.2	22.2
Omaha, Neb. . . . .	92.0	42.5	51.6	Spokane, Wash. . . . .	71.1	38.8	33.6
				Milwaukee, Wis. . . . .	94.1	48.7	47.6

† Deaths per 1,000 births for "total under 1 year" and "under 1 month." Deaths per 1,000 survivors at age of 1 month for "over 1 month."

A moment's glance at this table of unselected cities shows at once that the early infant mortality rate is by no means constant. The figures vary all the way from a rate of 33.6 per 1,000 live births in Oakland, Cal., to a rate of 53.9 deaths per 1,000 births in Lowell, Mass.



The average rate is 43.97 per 1,000. The absolute range is 20.3 and the standard deviation of the series, or the measure of the scattering tendency, is 5.2. The standard deviation is 11.8 per cent of the mean. For the last eleven months' mortality, the lowest rate is 22.2 for Seattle, Wash.; the highest, 86.4 for Fall River, Mass.; the mean is 49.75, the range is 64.2 and the standard deviation, 14.8. The standard deviation is 29.8 per cent of the mean. There is, therefore, much less variability in the mortality of the first month of life than in that for the last eleven months. But, this is not surprising, for we know that the mortality of the last eleven months is decidedly variable from one area to another, and this reflects very largely the different environmental factors influencing infant mortality. The time element is the all-important consideration. During the last eleven months of the first year of life, there is ever so much more room for the play of environmental factors than during the first month. This fact should be borne in mind in the interpretation of these measures of variability for the two age divisions of infant life.

That there is variation in the mortality in the first month of life suggestive of the presence of controllable external factors, is furthermore indicated by the fact that in the first month series the "range" is a little under four times the value of the standard deviation; whereas in the eleven month series, the range is a little over four times the standard deviation. If these 47 cities may be considered typical of urban conditions in various parts of the United States, we may say the early infant mortality shows considerable variability from place to place; in fact, the extent of this variability is greater than we had reason to expect from the general impression prevailing as to this phase of infant mortality.

Variability tests upon the infant death rates under one month for a series of race stocks in the American population bear out practically the same conclusions as were drawn from the locality series. (See Appendix table, page 95.)

There seems, from the facts available, to be good presumptive evidence that factors possibly associated with social and economic conditions, with sanitation, housing facilities, family income, industrial employment of the mother during pregnancy, the hygienic intelligence of fathers and mothers, and the character of obstetrical service, and so forth, are in some manner influential in giving rise to this variation from place to place and from group to group. All of these may be

responsible for some part of early infant mortality. In any case, before a negative conclusion can be drawn, it will be necessary to eliminate each one of these items as a possible cause.

That the factors indicated above have in some measure played a part in determining early infant mortality is further strongly suggested by our second line of attack, namely, to discover whether there is any *covariation* between early infant mortality and later infant mortality from place to place, that is, to discover whether early infant mortality is high or low as later infant mortality is high or low. This proposition was tested out in the 47 cities listed above, and it was discovered that the coefficient of covariation (correlation) between early and late infant mortality was  $.458 \pm .08$ . This means that to a significant degree, high early infant mortality rates are found in the cities having high later infant mortality rates and that low early infant mortality rates are associated with low later infant mortality rates. This would suggest that the causal agencies of much of the early infant mortality are to an appreciable degree the same as those which determine later infant mortality. The regression coefficient, that is, the measure of the increase in the mortality of very young infants which corresponds to an increase of one in the mortality of the remaining eleven months, is  $.161 \pm .031$ .

Parallel results are obtained by measuring the pair-for-pair variation of early infant mortality with that for the later eleven months in a time series. Thus, the figures for New Zealand for the twenty-two-year period, 1900 to 1921, give a coefficient of covariation of  $.5821 \pm .1169$ . The regression coefficient is  $.068 \pm .014$ . (See Appendix Table, page 95.)

The above considerations are speculative in character and strongly suggest that we are confronted with preventable causes of mortality in the first month of life. Our third mode of attack is to state the results of practical work carried out in a series of demonstrations in various parts of the country. The best proof, after all, of the preventability of early infant mortality lies in the facts of its actual prevention. That certain measures are effective in preventing early infant mortality can no longer be doubted by any one. Let us consider the facts for a few of the practical demonstrations in the field of early infant and maternal mortality. We, in America, are fortunate in our achievement in the recent campaign against early infant mortality.

The last ten years have seen the development of numerous efforts in various parts of the country which have been signally successful in the

reduction of early infant mortality. The results obtained in Boston through the efforts of the Visiting Nurse<sup>2</sup> and allied associations; the more important results of Dr. J. Whitridge Williams in a large series of cases in his obstetrical service at Johns Hopkins Hospital<sup>3</sup> and, more recently, the results obtained at the Maternity Center Association of New York City in cooperation with the Henry Street Settlement, all show that early infant mortality can be materially controlled through definite medical and nursing procedures. The writer has been especially fortunate in having had the opportunity to analyze the results obtained by the Maternity Center Association and presents the main points of that investigation below.

This study was concerned with the main results of prenatal care given to a total of 8,743 patients during a period of twenty-seven months closing August 15, 1921. The women received prenatal nursing care. This was of an intensive character and was carried out for several months prior to confinement by specialized nurses of the Association. Particular emphasis was placed upon the collection of urine specimens for the detection of renal disturbances and on the significance of the urinalysis findings. The home visiting of the patients was supplemented by visits to clinics, where the patients were examined and advised by the clinic physicians. While the Association did give its patients advice on the importance of good obstetrical service at confinement, the Association could not provide such service, and, as a result close to one-half of the patients were confined in the various maternity hospitals of the city. Postpartum visitation was carried out by the nurses of the Henry Street Settlement.

The results of this work are instructive for our purposes, both for their achievements as well as for their failures. The intensive care given to mothers during the period of pregnancy, and especially the emphasis on controlling the albuminurias of pregnancy, brought immediate results. The mortality from eclampsia was reduced to about one-third of the proportion that usually occurs in the general population from this cause. There were only three maternal deaths definitely ascribed to eclampsia where nine were expected. It is significant also that 95 per cent of the cases which showed albuminuria during preg-

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<sup>2</sup> Instructive District Nursing Association of Boston. Thirty-fourth Annual Report. Boston, 1919. See also: "The Most Efficient Means of Preventing Infant Mortality," Mrs. W. L. Putnam, *American Journal of Obstetrics*, July, 1918, pp. 104,105.

<sup>3</sup> "Significance of Syphilis in Prenatal Care and in the Causation of Foetal Death." J. Whitridge Williams, *Bulletin of the Johns Hopkins Hospital*, May, 1920, page 141. See also: "Value of the Wasserman Reaction in Obstetrics," J. Whitridge Williams, *Bulletin of the Johns Hopkins Hospital*, October, 1920, page 335.

nancy resulted in full term delivery. A proportion of only 5 per cent prematurity is a good result for this type of case, coupled with the reduced maternal mortality from toxemia. There was also a marked decline in the number of early infant deaths from prematurity. There was a total of 38 infant deaths from prematurity which corresponds to a rate of 4.8 per 1,000 births and constitutes 18.4 per cent of the total deaths. In the general population of the city of New York the prematurity rate in 1920 was 14.7 per 1,000 on births, and these deaths constituted 42.1 per cent of the total deaths under one month. In other words, the Maternity Center experience from prematurity as a cause of infant death was only one-third as high as in the general population of New York City.

In the following table we give a comparison of the facts for the Maternity Center Association and for New York City (1920):

Number of deaths under one month for certain diseases, per cent of total and death rate per 1,000 live births, New York City, 1920, and Experience of Maternity Center Association, New York City, 1919-1921

CAUSES	NEW YORK CITY, 1920			MATERNITY CENTER ASSOCIATION, NEW YORK CITY, 1919-1921		
	Number of deaths	Per cent of total	Death rate per 1,000 births	Number of deaths	Per cent of total	Death rate per 1,000 births
Total.....	4,651	100 0	35 0	207	100 0	25.9
Syphilis.....	63	1 4	5	7	3 4	9
Convulsions ..	14	3	1	6	2 9	8
Pneumonia and acute bronchitis	352	7.6	2 7	18	8.7	2 3
Diarrhea and enteritis .....	201	4.3	1.5	1	5	1
Congenital malformations .....	471	10 1	3 5	13	6 3	1 6
Premature births .....	1,957	42.1	14.7	38	18 4	4.8
Congenital debility .....	667	14 3	5 0	55	26 6	6 9
Injuries at birth .....	627	13.5	4.7	32	15 5	4 0
All other and unknown causes.	299	6 4	2 3	37	17 9	4 6

Congenital malformations show a significant reduction, the death rate 1.6 for the 13 deaths, comparing with a rate of 3.5 per 1,000 in the entire city. In the Maternity Center Association series, the malformation deaths accounted for 6 per cent of the total; in the general population, this condition accounts for 10 per cent of all deaths under one month.

To a lesser degree, the figures for stillbirths show the good influence of the prenatal care given these mothers. There were in all 220 still-

births in a total of 8,743 live and stillbirths combined, or at a rate of 25.1 per 1,000; the corresponding rate in the general population of Manhattan Borough in the period 1919 to 1921 was 46.5.

But when we have accounted for a saving from prematurity and from malformations and from diarrhea and enteritis, we have accounted for all of the saving. The deaths from syphilis, from congenital debility, from injuries at birth, show either no significant reduction in their mortality rate or even slight increases over the figures for the general population. This result is entirely consistent with the character of the service it was possible for the Maternity Center Association to render. As was pointed out above, the patients were not particularly safeguarded against unsatisfactory confinement service. About one-half were confined at home by a private physician or a midwife; the other half were confined in the hospitals of the city. The patients confined at home did remarkably well. Unfortunately, those confined in some of the hospitals did very poorly. In two or three of the hospitals, very unsatisfactory results followed from a succession of cases of septicemia. There is other evidence that the obstetrical departments of these particular institutions suffered from inadequate facilities of personnel and equipment. The benefits resulting from good prenatal work were lost through the breakdown of the obstetrical service. This accounts largely for the unsatisfactory results in the rate from dystocia as a factor in early infant mortality.

The prenatal work itself suffered seriously also from another defect, namely, the relatively slight emphasis that was placed upon syphilis as a complication of pregnancy. While women were encouraged to have Wassermans made early in pregnancy, and a considerable number did so avail themselves of the clinical facilities of the Association, actual tests were made in only a small proportion of the cases and intensive anti-syphilitic treatment was not sufficiently developed even in the group that was attached to the Association's clinics. The women for whom no Wassermann tests were made did not benefit even to this degree. There were seven infant deaths from syphilis with a rate of close to one per 1,000 births. There were also 55 infant deaths from congenital debility corresponding to a rate of 6.9 per 1,000 live births and, as is well known, a considerable proportion of these deaths may rightfully be charged to syphilis. The mortality experience for these two conditions did not show that the prenatal work had in any way favorably affected the results for the babies.

This defect in the program of the Maternity Center Association has, however, been made good in the work of other agencies. That the serious effects of syphilis on the infant can be materially controlled, is clearly indicated by the work of Dr. J. Whitridge Williams of Johns Hopkins Hospital.<sup>4</sup> To quote Dr. Williams:

\* \* \* I realized that the recognition and treatment of syphilis early in pregnancy constituted an important and fruitful field for a radical reduction in foetal mortality. The critical study<sup>5</sup> of 700 foetal deaths, occurring in 10,000 consecutive deliveries in the obstetrical service of the Johns Hopkins Hospital \* \* \* showed that syphilis was responsible for 26 per cent of these deaths, and that syphilis caused more deaths than any other single factor, and very many more than the toxemias of pregnancy, which up to that time had been considered the greatest field for prophylactic effort. Consequently, I concluded that if syphilis could be eliminated from among the causes of foetal death, greater progress could be made than by any other means available.

Dr. Williams continued his inquiry into this subject and from careful observations begun in April, 1916, and carried through the year 1919, he found that 12 per cent of the early deaths of white babies in this series were due to syphilis and that 45 per cent of colored infant deaths were so caused. Considering the group as a whole, 34 per cent of the infant deaths were syphilitic in origin.

The important point to recall, however, is that through concerted and efficient effort to discover syphilis early in pregnancy and through the anti-syphilitic treatment which these women received during pregnancy, Dr. Williams succeeded in reducing materially the number of deaths of babies from this cause. In as well controlled an experiment as he was able to make, he found that only 7 per cent of the babies of syphilitic mothers died within the first two weeks, or were stillborn, when satisfactory anti-syphilitic treatment was given, as compared with 52 per cent mortality of the babies of syphilitic mothers where no treatment was given. In a group of women receiving insufficient treatment, the mortality of the infants was 37 per cent. Dr. Williams estimated at that time that one-half of the infant deaths as a result of syphilis can be prevented. His later and matured conclusion in broad terms is:

If syphilis is recognized early in the pregnant woman, and is intensively and appropriately treated, almost ideal results may be obtained so far as the child is concerned. Consequently, there is every reason to hope that in the future

<sup>4</sup> *Supra cit.*: p. 142.

<sup>5</sup> "Upon the Limitations and Possibilities of Prenatal Care." Presidential Address, American Assn. for the Prevention of Infantile Mortality, 1915.

syphilis may be practically eradicated as the cause of foetal death in all properly conducted clinics in which the women register prior to the middle of pregnancy.

These results in Dr. Williams' service are borne out by the facts available in the obstetrical work of Doctors Polak and Beck of the Long Island Medical College, Brooklyn, N. Y.<sup>6</sup>

If it be true that syphilis, which is by far the most important cause of early infant mortality, can be reduced by appropriate methods to one-half or even less of its original figure, and if prematurity can be controlled to an equally satisfactory or to an even better degree by the prevention of eclampsias in mothers, then early infant mortality is distinctly preventable. The results are clear-cut wherever the work is well done. Further, there is the possibility of reducing early infant mortality through the discouragement of instrumental and other interference with the mechanism of labor. An inquiry among representative obstetricians in the United States and Canada early in 1921<sup>7</sup> suggested that there has been an increase in recent years in the use of artificial means to hasten labor, and that this practice is often accompanied by disastrous results to mother and child. The death rate from injuries at birth could be appreciably influenced by a change in this phase of obstetrical practice. In fact, the whole problem of improving the mortality record of early infancy depends upon the betterment of obstetrical service the country over.

If conditions in the country at large have remained what they were, it is not because we do not know how to improve the situation, but it is rather because the efforts which are known to be successful have been applied only to very limited groups and only very recently. The

<sup>6</sup> End-results of Prenatal Care A. C. Beck, *Jrl. of Amer. Med. Assn.*, August 6, 1921, page 457. Also correspondence with Dr. Polak and the writer.

An additional paper by Dr. Williams, "Influence of the Treatment of Syphilitic Pregnant Women upon the Incidence of Congenital Syphilis," *Bulletin of the Johns Hopkins Hospital*, November, 1922, p. 383, published since the present paper was first prepared, confirms the conclusions drawn from his data for the 1916-1919 series. Between January 1, 1920 and December 31, 1921, 96 of the women included in the 1916-1919 study, passed through 113 pregnancies in the Service and the outcome of the cases was determined. Nine of the pregnancies terminated in abortion and six in premature labor. From the autopsy and other evidence, Dr. Williams concluded that syphilis probably played no part in the production of any of the abortions or premature labors. Four other children died, but the autopsy in each case showed no sign of syphilis. Only four children were born dead, or died during the puerperium, and showed signs of congenital syphilis. Ninety children in all were discharged from the clinic in April and May, 1922, it was found that of the 94 children born alive, five, or 5.3 per cent, showed demonstrable evidence of syphilis, 76 were living and well, nine had been lost track of, and four had died (three from pneumonia and one from gastroenteritis). Dr. Williams concludes again that almost ideal results follow anything like efficient treatment of syphilitic pregnant women, and that surprising results may sometimes follow what would ordinarily be regarded as altogether inefficient treatment in men or non-pregnant women, which would seem to indicate that pregnant women are unusually amenable to anti-syphilitic treatment.

<sup>7</sup> *Statistical Bulletin*, Metropolitan Life Insurance Company, August, 1921, page 5.

pessimism which prevails with reference to early infant mortality as evidenced in the work of the English writers referred to above, will disappear as the appropriate measures are instituted for larger and larger numbers of American women and their infants. The conclusion would seem justified that the field of early infant mortality presents to the health officers, and to the voluntary health agencies of the country, a most promising opportunity for development. The stakes are whole years of life which may be added to the expectation of every man, woman, and child in the population. The means are at hand, and there is no obstacle in the fulfilment of these results but our own ignorance, or inertia.



APPENDIX TABLE  
STATISTICAL CONSTANTS USED IN TESTS OF INFANT MORTALITY DATA

CONSTANT	LOCALITY SERIES		TIME SERIES		NATIVITY SERIES	
	47 AMERICAN CITIES** 1920		NEW ZEALAND* 1900-1921		12 NATIONALITY GROUPS, U. S. BIRTH REG. AREA, ** 1920	
	Under one month	Last eleven months	Under one month	Last eleven months	Under one month	Last eleven months
Mean.....	43.97 $\pm$ 3.51	49.75 $\pm$ 10.01	29.70 $\pm$ .197	31.94 $\pm$ 1.689	40.05 $\pm$ .871	54.13 $\pm$ 3.29
Range.....	20.3	64.2	5.5	41.5	14.7	51.6
Standard deviation.....	5.20 $\pm$ .362	14.84 $\pm$ 1.032	1.37 $\pm$ .140	11.74 $\pm$ 1.194	4.48 $\pm$ .616	16.91 $\pm$ 2.33
Coefficient of variability.....	11.826 $\pm$ .834	29.829 $\pm$ 2.252	4.620 $\pm$ .471	36.763 $\pm$ 4.213	11.18 $\pm$ 1.012	31.24 $\pm$ 4.70
Coefficient of covariation.....	.4580 $\pm$ .0777		.5821 $\pm$ .1169		.3201 $\pm$ .1748	
Coefficient of regression.....	.161 $\pm$ .031	1.306 $\pm$ .249	.068 $\pm$ .014	.498 $\pm$ .100	.085 $\pm$ .049	1.209 $\pm$ .697

\* Original data from 1922 report, New Zealand Dept. of Health, page 80.

\*\* Original data from Birth Statistics, 1920, Bureau of Census. See also *Statistical Bulletin*, October, 1922, Metropolitan Life Insurance Company.

## **CERTAIN FACTORS TO BE CONSIDERED IN THE PROBLEM OF NEONATAL MORTALITY**

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It has been pointed out in publications by the Children's Bureau, several reports of special committees and personal papers that the maternal mortality in the United States is alarmingly high, that it is apparently the second highest of a large number of countries according to available statistics, and that even if correction were made for differences in accuracy of reporting, the United States would still occupy an unenviable position.

A similar situation exists in relation to the mortality of the first month of life. In spite of all the advancement in living standards, in educational qualifications for practitioners of medicine, in social and economic adjustments, in organized preventive medicine through non-official bodies, we are confronted with the fact that the mortality of the first month has been affected but slightly while the mortality under one year and over one month has shown reductions of 50 per cent in the past ten years in many cities and states.

The purpose of this paper is to consider certain data that may present additional facts for a discussion of the cause of this mortality and the best measures to combat it. If it serves the purpose only of demonstrating that we are "barking up the wrong tree" it may send us on the right scent and so serve as a basis for a more accurate solution.

### **NEONATAL MORTALITY (OR DEATHS UNDER ONE MONTH)**

In a paper to be read at Cleveland before the Child Hygiene Section of the American Health Service, I am submitting a study of the attendant at birth and the nativity of the mother as it relates to maternal as well as neonatal mortality. This report should be considered together with this discussion of the neonatal mortality, as both conditions are affected to a considerable degree by the same factors.

The neonatal mortality rate in Newark in 1921 was 40.6 for those attended by private physicians, 34.2 by hospitals and 32.3 by midwives. For the five year period the record is 38.3 for those attended by physicians, 45.7 for those in hospitals and 26.9 for midwives. A note should be made that in the five year period is included the year 1918 when as the result of the influenza epidemic the mothers who were affected by influenza were sent to hospitals and the new born infants died during the first month from lack of maternal care.

Table I.—Neonatal Mortality Rates by Attendant at Birth for Newark, 1921, and the Five-Year Period, 1917-1921

YEAR	ATTENDANCE AT BIRTH		
	Physician	Hospital	Midwife
1921 .....	40 6	34 2	32 3
1917 to 1921.....	38 3	45.7	26 9

An analysis of the cities in New Jersey in regard to neonatal mortality shows that the lowest neonatal mortality is in the city with more than one-half of the births attended by midwives. Of the four cities with a neonatal mortality rate below the average of the State, three had more than one-half of the births attended by midwives.

Table II.—Neonatal Mortality Rate Per 1,000 Live Births by Rank and Per Cent of Total Live Births Delivered by Midwives for the State of New Jersey and Ten Largest Cities for 1921

CITIES	NEONATAL DEATHS		Per cent of births delivered by midwives	CITIES	NEONATAL DEATHS		Per cent of births delivered by midwives	
	Rank	Rate			Rank	Rate		
State of New Jersey....	....	36 2	27					
Elizabeth.....	1	24.2	51	Camden .....	6	37.7	Unknown	
Hoboken.....	2	28.3	59	Paterson.....	7	38.5		21
Jersey City.....	3	33.6	38	Trenton.....	8	38.7		29
Bayonne.....	4	35.5	52	Passaic.....	9	40.8		57
Newark.....	5	37.0	38	Perth Amboy.....	10	45.6		66

Considering New Jersey by counties, we find that the counties with less than 6 per cent of their births attended by midwives have a neonatal

mortality rate ranging from 32 to 54 per 1,000 live births while those with 23 to 43 per cent of their births attended by midwives have a neonatal mortality rate from 29 to 42.

Table III.—Neonatal Mortality Rate Per 1,000 Live Births by Rank and Per Cent of Total Live Births Delivered by Midwives for the State of New Jersey and Counties for 1921

COUNTY	NEONATAL DEATHS		Per cent of births delivered by midwives	COUNTY	NEONATAL DEATHS		Per cent of births delivered by midwives
	Rank	Rate			Rank	Rate	
State of New Jersey	....	36.2	27	Middlesex . . . .	11	39.4	43
Union . . . . .	1	29.6	30	Cape May . . . . .	12	39.6	.. . . .
Hudson . . . . .	2	32.6	38	Mercer . . . . .	13	40.1	.. . . . 23
Salem . . . . .	3	32.8	2	Hunterdon . . . .	14	41.0	.. . . .
Essex . . . . .	4	34.2	30	Monmouth . . . .	15	41.2	.. . . . 5
Bergen . . . . .	5	34.7	18	Somerset . . . . .	16	42.0	.. . . . 28
Cumberland . . . .	6	35.2	3	Warren . . . . .	17	43.7	.. . . . 2
Atlantic . . . . .	7	37.6	4	Morris . . . . .	18	43.8	.. . . . 2
Gloucester . . . .	8	37.7	2	Burlington . . . .	19	44.0	.. . . . 10
Passaic . . . . .	9	38.5	41	Sussex . . . . .	20	45.9	.. . . . 3
Camden . . . . .	10	38.6	15	Ocean . . . . .	21	54.0	.. . . .

In Newark during the past three years there has been a decrease in the percentage of cases attended by midwives from 45 to 38 while there has been an increase in the neonatal mortality rate from 31.6 in 1919 to 37.0 in 1921. The neonatal mortality in Newark in 1921 from babies delivered by midwives was 32.3, those in hospitals 34.2, physicians of private practice 40.6. I have also taken a five year average which gives the lowest rate for midwives, 26.9 and highest for hospitals, 48.7.

In the 15 largest cities in the United States the neonatal mortality was highest in Buffalo, namely, 49 per 1000 live births and lowest in San Francisco with a rate of 23. New York City, Philadelphia, Baltimore, and Newark have rates between 32 and 37, while the other five cities have rates of 40 and above; no data was obtainable from four cities.

Newark with the highest proportion of cases delivered by midwives, 38 per cent has the fourth lowest neonatal mortality rate. This is three points lower than Boston, which I may be permitted to repeat, claims only 2½ per cent of its births are delivered by midwives.

Stillbirths may be considered in connection with maternal and neonatal mortality although we recognize that syphilis is probably a

larger factor than it is in the death of mothers or the deaths under one month. The average stillbirth rate for the State is 41.4. This is about the average throughout the country and has been for many years. The lowest stillbirth rate is in the city where two-thirds of the births are attended by midwives and is 29.4, 25 per cent lower than the average for the State. Of the five cities with stillbirth rates of 40 or below, four had more than one-half of the births attended by midwives.

Table IV.—Stillbirth Rates Per 1,000 Live Births by Rank and Per Cent of Total Live Births Delivered by Midwives for the State of New Jersey and Ten Largest Cities for 1921

CITIES	STILLBIRTHS		Per cent of births delivered by midwives	CITIES	STILLBIRTHS		Per cent of births delivered by midwives
	Rank	Rate			Rank	Rate	
State of New Jersey.	.	41.4	27				
Perth Amboy . . . . .	1	29.4	66	Newark . . . . .	6	45.8	38
Elizabeth . . . . .	2	33.0	51	Paterson . . . . .	7	45.9	27
Bayonne . . . . .	3	35.9	52	Jersey City . . . . .	8	46.6	38
Trenton . . . . .	4	37.8	29	Hoboken . . . . .	9	52.0	59
Passaic . . . . .	5	40.2	57	Camden . . . . .	10	54.3	Unknown

Table V.—Stillbirth Rates Per 1,000 Live Births by Rank and Per Cent of Total Live Births Delivered by Midwives for the State of New Jersey and Counties for 1921

COUNTIES	STILLBIRTHS		Per cent of births delivered by midwives	COUNTIES	STILLBIRTHS		Per cent of births delivered by midwives
	Rank	Rate			Rank	Rate	
State of New Jersey . . . . .	.. .	41.4	27				
Cape May. . . . .	1	30.8		Atlantic. . . . .	11	38.6	4
Burlington. . . . .	2	32.3	10	Mercer . . . . .	12	39.2	23
Middlesex . . . . .	3	32.5	42	Monmouth . . . . .	13	39.5	5
Sussex . . . . .	4	33.2	3	Passaic. . . . .	14	41.6	41
Cumberland . . . . .	5	33.7	3	Essex. . . . .	15	41.8	30
Union . . . . .	6	34.6	30	Morris. . . . .	16	42.2	2
Bergen . . . . .	7	38.0	18	Hudson . . . . .	17	46.8	38
Somerset . . . . .	8	38.1	28	Hunterdon . . . . .	18	47.1	.. .
Ocean . . . . .	9	38.2	.. .	Camden . . . . .	19	50.5	15
Gloucester . . . . .	10	38.6	2	Warren . . . . .	20	52.0	2
				Salem. . . . .	21	55.1	2

## NATIVITY OF MOTHER AND MORTALITY RATES

Perhaps the explanation for the lower neonatal rate for midwives cases is to be found in the fact that midwives attend women of foreign birth and doctors, particularly in the hospitals, women of native birth. At any rate an analysis of death rates by nativity of mother shows a marked difference in their mortality rates.

Table VI.—Neonatal Mortality Rates by Nativity of Mother for Newark, 1921, and Five-Year Period, 1917-1921

NATIVITY	YEAR	
	1921	1917-1921
United States * . . . . .	41.1	42.3
Italy . . . . .	29.3	26.9
Russia . . . . .	27.5	28.5
Austria . . . . .	19.2	31.2
Germany . . . . .	19.6	40.8
England . . . . .	56.0	30.7
Ireland . . . . .	38.4	35.6
Others . . . . .	41.4	54.4

\* Under "United States" is included colored births representing 5 per cent of total for city or 10 per cent of natives.

This fact is to be emphasized and taken into consideration in reporting results of special measures for the solution of this problem, as intensive prenatal work, as it is obvious if the piece of work is done among a group that normally presents a lower rate than the city as a whole, the mistake will be made of crediting to the special effort or special measure what is normally the lower rate of a special group. I believe that an analysis of the figures published by those interested in prenatal work will show that a good part of their reported good results as evidenced by a reduction in mortality rates is due to the normally lower rates in the specially selected groups or districts.

The neonatal mortality rate among infants of Italian mothers in Newark was 29.3, and that for all infants attended by midwives 32.3. The neonatal mortality rate of Russian mothers 27.5, Austrian 19.2, while that for infants of native born mothers was 41.1. Midwives attended 83 per cent of the Italian mothers, 53 per cent of the Austrian and only 16 per cent of the native born.

Table VII.—Percentage of Births by Nativity and Attendant for Newark, New Jersey, for 1921

NATIVITY OF MOTHER	ATTENDANT AT BIRTH				
	Per cent	Total	Physician	Hospital	Midwife
Total births.....	100	100	30.1	31.7	38 1
United States +.....	51.5	100	37 3	45.7	16 9
Colored.....	.....	100	37 0	41 4	18
Italy.....	20 9	100	12 1	4 2	83.5
Russia.....	7 1	100	39 3	35 5	25 2
Austria.....	4 8	100	25 2	21 1	53 5
Germany.....	1 3	100	35 9	42 4	21.5
England.....	1 0	100	32 8	56.8	10 4
Ireland.....	2 2	100	51.9	34.2	13 8
Others.....	10 9	100	20 5	15.8	63.6

+ Includes colored: 5 4 of total and 10 per cent of United States.

Table VIII.—Maternal Deaths, Stillbirths, Infant Deaths Under One Year, and Under One Month, Per 1,000 Live Births by Rank and Per Cent of Total Live Births Delivered by Midwives for the State of New Jersey and Ten Largest Cities for 1921

CITIES	Rank by population (highest first)	Maternal deaths (lowest first)	DEATHS		Stillbirths	BIRTHS ATTENDED BY MIDWIVES	
			Under one year (lowest first)	Under one month (lowest first)		Rank (highest first)	Per cent
Entire State . . . .	...	...	...	.....	.....	...	27
Newark . . . . .	1	5	2	5	6	6	38
Jersey City . . . . .	2	9	8	3	8	6	38
Trenton.....	3	10	5	8	4	7	29
Camden . . . . .	4	7	10	6	10	Not reported	52
Bayonne.....	5	3	6	4	3	4	51
Elizabeth . . . . .	6	2	1	1	2	5	59
Hoboken . . . . .	7	4	2	2	9	2	66
Perth Amboy.....	8	1	9	10	1	1	57
Passaic.....	9	6	7	9	5	3	27
Patterson.. . . .	10	8	3	7	7	8	

## CLOSING

A consideration of this data seems to suggest:

1. That the deaths under one month and stillbirths are not unfavorably influenced by the percentage of births attended by midwives.
2. That the lowest stillbirth rates and neonatal mortality rates

are found in those groups of mothers that from an economic, social, and housing standpoint would be held to present an unfavorable environment.

3. It would seem then that in spite of the supposed general ignorance of sanitation and hygiene of the foreign speaking groups, of their unfavorable physical environments, of their failure to avail themselves of medical and hospital facilities, that there are some conditions and practices that more than counterbalance the so-called unfavorable circumstances.

I believe these conditions are:

a. A larger percentage of multipara; this means that the mothers of the foreign-born groups marry earlier and interfere less with the natural process of birth.

b. As a result of this there is probably a lower incidence of gonorrhea and syphilis.

c. There is a more highly developed natural maternal instinct which leads to a greater degree of mothering and more particularly a higher incidence of successful maternal nursing.

From these facts it would seem that in a campaign for the prevention of the unnecessary deaths among infants under one month of age that the most immediate results will be obtained by those methods which will have all mothers adopt the practices and customs in regard to marriage, child-bearing, and the care of infants that is found among our foreign-born mothers.



## **ADMINISTRATION OF PRIVATE CHILD HYGIENE ORGANIZATIONS**

**HOMER FOLKS, Secretary of the State Charities Aid Association of New York  
and Former President of the American Child Hygiene Association, Presiding**



## INTRODUCTION BY THE CHAIRMAN

HOMER FOLKS, New York

This morning we are to continue the consideration, which we began last year at New Haven, of the administration of voluntary organizations dealing with child hygiene. We might take a moment at the outset, while others are coming in, to speak, not of those specific phases of administration which will be dealt with by later speakers, but of voluntary organizations in general, in the field of health, and for the purpose of making only one remark. The question is rapidly coming to be a live one of what is the field of voluntary health organizations, or even is there a field for them at all. We may profitably ask ourselves, what is the attitude of voluntary health organizations toward public health organization, and toward certain objectives, to which I suppose we all agree in principle; namely, that public health is primarily a public function; that we look forward to an increasing development of the public agencies; and that we regard it as proper that activities in the field of health should be generally applicable to the entire community, supported by taxation, and directed by the representatives of all the people. We all probably agree to these sentiments, *a priori* and in principle; but I wonder if there isn't a little difference, as Ambassador Geddes pointed out last evening, between knowing something and fully realizing its implications and its bearings.

I got a little new light a few days ago as to what might be in the minds of some of our public health officials, when they emphasize that point of view, not always very graciously, or not always for reasons to which perhaps we would entirely agree. We might concur in the decision, but dissent from the argument. I think I see perhaps a little more clearly what they mean, or at least what they might mean, and perhaps ought to mean, only they may not phrase it that way. If you look at two different fields a moment, we will say, for instance, education and hospital care, we will see that in the field of education, we do have a very clear-cut public system; and that we have realized, in fact, what we are speaking of in theory, in regard to health, public responsibility, a public system, and a constant expectation that the public activity will be adequate to the need.

In the field of hospital care, we do not expect public provision ever to be equal to the need,—at least we do not in New York. We have every kind of hospital. Every racial group, and all sorts of other groups, have their hospitals. The public has some hospitals, but there are more private hospitals, and the private hospitals have not the least idea of getting out of the field. They expect to go in perpetuity. They plan to—they are getting endowments. That is their whole point of view. Consequently we do not have any one central responsibility for even finding out how much hospital care we need.

Perhaps our friends, the public health officials, have it in mind, that they wish to arrive ultimately at something more like the public school system than like the hospital lack of system.

I suppose there was a time, and that not so very many decades ago, when the thing hung in the balance, when it was not certain as to whether or not there would be a public school system; or whether we would always have charity schools, and private schools, and every kind of schools, and the public just take care of what was left over. We might easily have had that result, I expect, if things had taken a little different course a few years ago. I wonder if we are perhaps at about that stage in health right now. These things are determined unconsciously; nobody ever consciously settles them, in my opinion. Maybe we are now doing things which will determine whether or not we have ultimately a real public health system, by the attitude we take as private organizations as to our own future. Ought we not to be asking ourselves: Do we really mean what we say when we talk about public health as a public function and a public duty? Are we planning to permanently occupy the field? Do we mean to be temporary?

On the south coast of Spain there are two towns, or there were. I am not sure that public officials may not perhaps have a little in mind that situation. One is Algeciras and the other is Gibraltar. Many years ago the Spanish governor was governor of both of them. I am told that the governor still signs his official papers that go to headquarters—so and so, Governor of Algeciras and Gibraltar—the latter temporarily in the possession of the British. Do we need to beware a little, maybe, that in our case, “temporarily” does not drag on; that we do not dig in and fortify ourselves, so to speak; instead of really realizing what it means when we say, that we are getting ready to turn things over and push them more and more onto the public.

And I suspect that the turning point may be in our encouraging, and assisting, and persuading the public departments to put forward a complete program. I expect we have a public school system because the public school authorities at a certain period of time came forward with a program that was adequate. Then people got back of it. I do not think this health question is going to be settled by somebody saying it is to be this, that, or the other way, but that the public authorities, if they are going to do it, must come forward with a program that captures the imagination and support of the people; and then it will become a public function and duty. Otherwise it won't.

And do we, as voluntary agencies, consciously make that a main part of our program, to do what we can to get this public system established. Or are we, on the other hand, perhaps, drifting into a situation which would mean a permanent division and dispersion and disorganization of the field, such as we have in the field of hospitals?

## **ADAPTATION OF THE CHILD HYGIENE PROGRAM TO LOCAL CONDITIONS**

**BAILEY B. BURRITT**, General Director, New York Association for Improving the Condition of the Poor

Your chairman has prepared the way most admirably for the thought I had in mind in the preparation of this paper. I had thought it would be quite impossible to consider the adaptation of the program of child hygiene to local conditions without considering the relation of private to public authorities. I wanted to start with the assumption that in any community, you must have a single, unified, well considered program which the public and private authorities will have thought out consciously together, in which the part of the voluntary organizations is clearly defined, and in which each of these shall work consciously for the promotion of the whole unified program in the community.

One can scarcely discuss the adaptation of the child hygiene program to local conditions without considering the relative parts of the public and private organizations in a unit program for any given community. As a background for this discussion, it is assumed that the child hygiene program in any given community should be a well coordinated unit in which the private and public organizations each have their well defined and agreed upon parts. This is adaptation No. 1 as it were, that is to say, there can be no fruitful child hygiene program in any given community unless a well thought out program of operation of existing activities is agreed upon and unless also a forward-looking and expansive program in which the part that each organization, whether public or private, is to play in it, is thoroughly considered and agreed upon by those responsible for the direction of both public and private organizations. This point, I feel cannot be made too strong, as only haphazard child hygiene programs in communities can result if this fundamental adaptation is not made.

This discussion assumes also that in any community in which the public health authorities are seriously attempting a child hygiene program, the leadership for the child hygiene program should rest in the

hands of the public authorities and that the function of private organizations dealing with child hygiene in a community is to supplement that of the public authorities in such ways as are considered by both as helpful in the local situation. This assistance of the private organizations may be in the form of doing temporarily pieces of work for which the public authorities had not and could not get funds; it may be by starting new experiments, demonstrating methods, and preparing the way for the information of the tax-paying community to the point where it will be willing to support such new and extended activities, or it may even, under the conditions which may exist in a given community, mean the more or less permanent operation of certain sharply defined activities that are necessary but for which there is no immediate prospect of public support. Even in those communities in which the leadership of the public health work is such that it is difficult to work out ideal cooperative arrangements and to depend upon the public health authorities for leadership, every effort should be made to bring about conditions which will warrant such a program. In other words, the private child health organization should adapt its program, under these circumstances, not to building up something that it will permanently undertake to operate in the community, but to looking directly forward to bringing about such changes, conditions in the public health activities of the community that suitable leadership will be provided and that the work of the private organization may become truly supplementary to and an ally of the public health authority rather than tending to become an organization which will take the place of the public health authority. Child hygiene, in other words, is the business of the community. It should be organized, directed, and led by the public authorities and be supported by public taxation just as far as this can be done. The voluntary organization is the preparer of the way for such an outcome.

#### ESSENCE OF THE CHILD HYGIENE PROGRAM

Let us now focus our attention for a moment on the outline of a child hygiene program in order that we may picture more clearly what adaptations are likely to be necessary. The child hygiene program, as usually understood, begins with prenatal work. It has as its result the creating of such conditions in any community that every child will be given a right to be born physically well. It involves a general educa-

tional campaign with regard to the importance of prenatal supervision. It involves the provisions of adequate facilities for examination of pregnant mothers and adequate supervision for suitable nursing or other follow-up in the homes to make certain that the elements of the program are carried out in the individual cases. It is not complete until every expectant mother is educated to the importance of giving close heed to the care of herself during pregnancy and is brought in touch with medical and nursing facilities that will enable her to do this to the greatest advantage. After the birth of the child, the child hygiene program focuses its attention not only on the physical condition of the mother, but on the condition of the babe itself. It involves a relatively simple, well defined program, including the continued supervision by either the private physician or the public clinic, the continued visitation of the visiting nurse, the repeated examination and weighing of the babe, special reference to the importance of breast feeding, and later, to the suitable feeding of the babe during the weaning period. Supervision of this character roughly extends from birth until two years of age and in the most communities involves the establishment and utilization of baby health stations which, in addition to medical and nursing service, provide not only instructions as to suitable formulas for feeding babes, but suitable milk at cost for such feeding.

Immediately following on the infancy period, the pre-school problem appears as a somewhat separate problem in the child hygiene program. This involves the establishment, either in connection with the baby health stations or elsewhere, of facilities for the periodical examination of pre-school children. There are no well accepted standards as to just how frequently the pre-school child should be examined, as most communities are only just beginning to provide the most meager facilities for any examinations of this character. It is clear that the child should be examined at least once during the period from two to three years of age and once more during the year preceding its entry into school for the purpose of preventing so far as possible the development of defects and of ascertaining what defects may have already developed in order that, so far as possible, they may be remedied before they cause serious trouble. It involves not only the establishment of medical examination clinics for this group but also the provision of nursing and nutritional follow-up in homes. It is not meant by this to imply that the examinations should be limited, by any means, to these two, as it is quite obvious that there should be more frequent examinations, but these are the two

minimum examinations that are necessary in any community, which undertake to do anything serious with the pre-school problem.

Following the pre-school is the school problem of periodical examination by the medical inspector and the follow-up of the school nurse. This period has developed in our various communities much more fully than has the pre-school supervision, although perhaps not of as much importance from a preventive and educational health point of view as the pre-school group. Even in this group, however are sad gaps in many communities and important gaps in most communities.

Following the school child hygiene program is the industrial child hygiene program involved in getting the school child suitably started in its industrial career. This program has not been very fully worked out in most communities but it obviously is an important activity in any thoroughly well rounded community child hygiene program.

Running all through the child hygiene program, as an important element of it, is the problem of nutrition. It begins with the expectant mother. Adequate nutrition of the expectant mother is of the greatest importance to the child about to be born. It is receiving increasing attention at the hands of health authorities but has not yet been adequately provided for. Most attention has been given to the nutritional problem in the age group from birth to two years of age. Very little attention has been given to the problem although it is very important, during the pre-school period, but this is but a part of the general neglect of the child of this age. It continues to run through the school and industrial periods as a problem, but has as yet received inadequate attention in these groups.

Similarly, the dental problem is another conspicuous relatively neglected part of the child hygiene program running all through it. It begins with the expectant mother—in fact, the correlation between inadequate diet of the expectant mother and the decay of teeth of the coming child seems much more definite and real than we have heretofore been conscious of. In addition to this it is important that the mother's own teeth be put and kept in good condition during her pregnancy. Similarly, the importance of emphasizing diet in its relation to tooth decay, as well as the importance of periodical cleanings of the mouth and prophylactic fillings, is necessary in the pre-school period. With relatively few exceptions, dental work has been confined pretty largely to the school age group in the child hygiene program and has been but very inadequately developed there, with the exception of two or three



cities which have developed something like a reasonably adequate program for dealing with children's teeth.

There are, to be sure, other factors that run through the whole child hygiene program in the same way that the nutrition problem does, and the dental program does. I cited these two, however, as relatively neglected features of the child hygiene program.

#### WHAT ADAPTATIONS ARE LIKELY TO BE NECESSARY

Now that we have considered briefly the relation of the private or voluntary organization to the public health organization in dealing with child hygiene problems and have also considered briefly the elements that are involved in a child hygiene program, let us address ourselves to the main subject of the consideration of this discussion: namely, "The Adaptation of the Child Hygiene Program to Local Conditions." In the first place, as the foundation which I have tried to lay clearly indicated, the most important adaptation is the adaptation of the child health program in any given community to the fact that the function of the private organization in this program is that of supplement and ally to the public health organization. If a public health child hygiene program has secured relatively little or no start in any given community, then the voluntary organization that is considering any may have or can get resources to assist in developing a child health program, must consider first of all whether it is possible to rouse the community at once to the importance of the public health authorities undertaking a child health program. If this can be done and adequate leadership of the public health authorities for the development of such a program can be secured, then the obvious adaptation necessary is for the private voluntary organization to devote its efforts to educating the public to the importance of supplying the funds and demanding of the public health organization a carefully thought out and well directed child hygiene program. At the same time, it should use its diplomacy to the fullest extent with municipal or other appropriating and governmental authorities in securing adequate leadership for the development of the program.

If, on the other hand, in any given community there is already a good beginning made on the part of the public health authorities in the development of the child hygiene program, then the situation would seem to call for a joint consideration on the part of the public health

authorities and the voluntary child health organization for the purpose first of agreeing upon what the next desirable steps are. The second point to secure agreement upon would be the relative parts of the public and the private organizations in the development of the program agreed upon. Experience would seem to indicate that in most communities of this kind the function of the voluntary private child health organization is that of propaganda and general education of the public, the carrying out of experiments for the purpose of determining the wisdom of any proposed expansion and the best methods of carrying it on, and in addition to that, the demonstration of the feasibility and importance of this particular expansion of the program to the general public to the point where they will be willing to add it to the work which the public health authorities are doing and pay for it in their annual tax bill.

In still other communities where child health work is very well developed on the part of public health authorities and where it is under wise leadership, no function of the private organization may be necessary other than that of carrying on an unofficial organization in the community which is definitely and consciously undertaken to build up support for the publicly supported and controlled child health program. In practically every community, a voluntary organization can be of great help to the public health authorities and to the development of an adequate child health program through carrying on systematic and continuous educational campaigns among the citizens as a whole, but to be most effective, it must be closely correlated with the child health program which the existing public health authorities are carrying on.

#### ADAPTATION TO LOCAL EXISTING ORGANIZATION

It is not only necessary to secure an adaptation of the work of a local private child hygiene organization to that of the public health authorities but it is also necessary to secure a careful coordination of their work and the work of the public health authorities with other existing organizations. Frequently one of the important functions of a private and voluntary child health organization will be that of leadership in working out adaptations in such a way that every organization that is in a position to contribute in part to a well rounded child health program for the community will be put in the best possible position to make their particular contribution and to do it with a maximum of effectiveness and a minimum of friction with the public health organ-

ization itself. These adaptations require not only continuous and careful study but experience indicates that they are most effectively brought about through some kind of a voluntary committee which has representatives on it of all of the organizations which are in the position to make any contribution to the child health program. In large cities, this adaptation involves the forming of district committees representative of the various local organizations operating in any given district as well as the formation of a general correlating committee for the city as a whole.

### SOME CONCRETE ILLUSTRATIONS

Having dealt thus far with a few very general underlying principles dealing with the subject of adaptation of the child hygiene program to local conditions, may I draw more fully on my experience with the development of an intensive child health program in a small area in New York City by the New York Association for Improving the Condition of the Poor. This activity known as The Mulberry Health Center has now been operating for about four years and at present is expending yearly over \$50,000. It has been dealing with an Italian population of approximately 35,000 in a congested portion of the city and has undertaken to deal with child health problems from the prenatal period to and including the school period.

### ADAPTATION TO WORK OF DEPARTMENTS OF HEALTH AND EDUCATION

A study of the needs of this district before the activity was begun disclosed the fact that the existing public health authorities were also doing what they could with their very inadequate force in dealing with the medical inspection of school children and the follow-up of this through the school nurse. Joint conferences between the New York Association for Improving the Condition of the Poor and the Health Department agreed upon the necessity of a program which would develop prenatal supervision, develop facilities for dealing with the pre-school child and supplement what was being done with the school child and also supplement what was being done for the babe up to two years of age through baby health stations. It was clear also that the program should include a dental program and a special nutrition program. Because of the impossibility of undertaking all of these needs

at once, it was agreed that the private voluntary organization; namely, the New York Association for Improving the Condition of the Poor, would assume no responsibility for work with the children of the baby health station age group. It would, on the other hand, confine its efforts to bringing the expectant mothers of the district under as complete medical, nursing and nutrition supervision as possible and to providing medical examination clinics and suitable follow-up for children of pre-school age. In addition to this, it was agreed that the private voluntary organization should undertake to develop a well rounded preventive dental program, utilizing such facilities as were already maintained by the Health Department in this particular area. It was also agreed that the voluntary organization would undertake as much follow-up work as they could in homes in which they were visiting, dealing with the discovery and removal of defects of children of school age which the school authorities were not able to touch with the limited number of school nurses which were available for this district.

#### ADAPTATION TO OTHER LOCAL ACTIVITIES

In the very beginning, this was adapted to the existing public facilities in the area. Similarly, it was adapted at once to the facilities offered by other voluntary organizations operating in this area. It was agreed, for example, that the existing visiting nurse association would be called upon for all of the bedside nursing in the area, as they were already undertaking considerable bedside nursing. Similarly, it was agreed that existing relief facilities should be called upon for any relief problems which might be uncovered in the development of the child hygiene program. Clinic facilities of neighboring dispensaries are similarly utilized to the fullest extent possible and it was agreed in advance that in no instance should a new facility be provided if it already existed, or if it could be readily created through the instrumentality of any existing agencies. To this end every effort has been made to develop facilities that were inadequate rather than to establish new facilities to take the place of those that were inadequate. This represents certain important initial adaptations in getting this work under way. As the program developed further, continuous concrete adaptations were suggested and carried out.

## ADAPTATIONS IN THE DENTAL PROGRAM

A description of adaptations that took place in the development of the dental program for this area will illustrate what adaptations would be likely to be necessary in any local situation.

In the first place, it was necessary to adapt the dental program to the dental profession. This was undertaken by organizing, in advance of the beginning of any actual dental work, an advisory committee consisting of men selected from the dental profession in the City of New York, who served as a committee, first to study the problem to see what should be done in the area, and second, as an advisory committee, continuously sitting, on the problem of helping to develop the program after it has been agreed upon. This committee was chosen in such a way as to include some of the most progressive men in the dental profession and also to include as well the official representatives of the two leading dental societies in the city of New York. Included on the committee was also the supervising dentist of the dental work done by the Health Department in the public schools. In this way, we had the best advice obtainable in the development of the program, and the development of the program itself exerted a definite influence on the dental profession and the dental work of the Health Department. As a result, the dental program has had the heartiest backing and support of the whole dental profession in New York City from its very beginning.

Similarly, it was necessary to adapt the dental program to that of the district, including the parochial schools. At first the principals and school teachers were either skeptical of the necessity of additional dental work or found it exceedingly difficult to make any provision for it as a part of the school routine. These persons had to be won over by personal conference and by conference with officials of the Department of Education as well as officials of the Department of Health, in order to make it possible to have an actual physical place to do the work contemplated. At first, it was the definite desire of school principals to have the work which was contemplated done with the children in the upper grades for the very commendable reason that they were anxious to have the students leave school with their mouths in good condition. By equally careful planning, they were led to see the importance of devoting their energies to the youngest children first and then gradually extending it as time would permit to the older children in the school. Not only was it neces-

sary to adapt the program to the schools and to school authorities in order to have a convenient place to do the work, but there was constant daily adaptation within the school itself — adaptation to the school program including the securing of the cooperation of teachers in such a way that children would be available at the time arranged for; adaptation to the parents of the children and the securing of the cooperation of school principals in getting parental consent, which was deemed necessary in each case, before any dental work was undertaken.

The dental program included the cleaning of the mouths of the children in the first five grades twice a year. This seemed to offer an opportunity for influencing the training of dental hygienists authorized by the law of the State of New York and provided for to some extent in the Oral Hygiene School of Columbia University. The consideration of this brought about an adaptation of the dental program to the training school program for dental hygienists in such a way that a number of the students of the Oral Hygiene School of Columbia University have each year found it possible to secure actual field practice with children in the area in which the Mulberry Health Center is operated. This has been a benefit not only to children whose mouths have been cleaned by students under competent supervision of their instructors, but has also been a great advantage to the training of the dental hygienists. Similarly, an effort has been made, though not as yet successfully, to adapt the program in such a way that it can have a similarly valuable influence on the training of the dentist himself. It is thought that such a program, linked up closely and effectively with the Dental College so that it would be required of each senior student that they have careful, well-supervised, prophylactic work on children as a part of their training, would result in our having a group of dentists in the community that really knew something about the hygiene of children's mouths.

In one of the public schools of the area, the Health Department had a dentist on part time, but had no dental hygienist. The committee decided to provide a hygienist for this school in order to complete the program and subsequently the Health Department itself was granted, by the appropriating authorities of the city, additional dental hygienists for the work in schools, and one of them was assigned to the public school to which I have referred. This freed the hygienist which was working in this school for work in another school. This again illustrates the day to day adaptations that are inevitably necessary in such a program if it is to meet with the greatest possible success.

Then in addition, there was the necessary adaptation of the whole experience of the dental program, as it developed, to the program of dental work in public schools of the city at public expense. In other words, the Health Center had to think continuously in terms of influencing the support of the Health Department in its efforts to extend dental work to all of the schools of the city. The Health Department of New York City now has a measurably larger staff of dentists and dental hygienists than it had when Mulberry Center began its work, although it is still far from being able to cope with the dental program in the public and parochial schools. I think that the Health Department, however, would join us in stating that the establishment and development of the dental program in the Mulberry Health Center district has been a distinct help to them in securing the extension of the dental work done by the city itself.

#### ADAPTATION IN THE FIELD OF PRENATAL WORK

In the development of the prenatal program in this area, there were continuously similar adaptations to be made. There was first the adaptation of prenatal work to the fact that most of the mothers of that area were looked after by midwives. The program, therefore, had to be adapted to the midwife situation in such a way that it would elicit the interest and support of the midwives rather than their antagonism and in order that it might lay the foundation very gradually but effectively for influencing the work of the midwives themselves. It was necessary also to adapt the prenatal work to the local physicians doing obstetrical work in that area. It was necessary to adapt it to the work being done by maternity hospitals and all of these adaptations required frequent conferences and almost daily contacts. In fact, it is the little by little adaptation, occurring each day, that really makes the major adaptations easy in the development of any child hygiene program in any community. Perhaps I should have mentioned first of all that the prenatal work had to be adapted to the mothers themselves. They didn't know what it was and had no idea of its being a thing valuable to them. They had to be made to see its use by seeing it in operation and by sympathetic, daily contacts with them. It was necessary also to consider daily the adaptation of the work to the work of the baby health stations in the district in such a way that the prenatal

and postnatal instruction could lead most naturally and directly to the latter supervision of the baby health station itself. It is interesting also to note that the Mulberry Health Center secured the active cooperation of the Health Department, which maintains the baby health stations, in insuring the continuous supervision of the child as a pre-school problem by the Health Center itself, after the period for which the baby health station assumed responsibility.

### RICKETS

One other interesting adaptation, which is by no means completed, is an adaptation that has grown out of experience in dealing with the problem of rickets. While it is agreed in the beginning that the Health Department should assume complete responsibility for the child during the baby health station age period and that the Mulberry Health Center should undertake to deal with the supervision of the pre-school child, an age group for which nothing was being done in the district, it was discovered, as a result of the first two or three years of experience, that this left a very important need unfilled. The pre-school examination clinics' most frequent report was one indicating symptoms of rickets in children. The Health Department did not have an adequate force to carry out an intimate and complete supervision in the home of the age group which were presumably attending the baby health station. The examination clinic of pre-school children indicated the necessity of much intensive work in the baby health station age group if it were going to be possible to prevent rickets from developing rather than to undertake to deal with them after they were developed. This resulted in further conferences with the Health Department and in an agreement to work together on the supervision of this age group in such a way that the Health Center would supplement what the Health Department was able to do with its limited resources to the end that more rickets might be prevented. This is in process of being worked out at the present time, requiring still further adaptation. It has as its possibility, which it seems to many of us can be realized, the development of a relatively ricketless area in an area, where because of the nationality and other conditions, the amount of rickets has been very considerable.



## CONCLUSION

I have dealt thus with the concrete details of adaptation because these are the essence of the adaptation of the child hygiene program to local conditions, which is the subject of this discussion. In the development of such a program, one must think in terms of adaptation from the beginning to the end, and as I have tried to indicate, the most important thing, in addition to having an adaptable frame of mind, is the daily contact with this or that health officer, local worker, school principal, or other person, finding out fully just what is in their minds, just how the work is affecting their work, and making continuous, constant, daily small adaptations to their way of thinking, to their method of working and securing in return similar voluntary adaptations on their part. It is only by a suitable frame of mind and constant attention to the problem of adaptation that the work of the private organization, interested in the child hygiene program, can prevent the development of frictions and interferences, which, while small in the concrete, may become very large and very real hurdles in the path of progress of community child hygiene work.

What this paper has undertaken to develop very inadequately therefore, is the theme that the private organization undertaking to do work in this field should, first of all, have a real faith in the ultimate effectiveness of public health work and should hold before itself as a goal the development of publicity supported and publicly controlled child hygiene work; and second, that during the development of the local work with its goal in mind, it should continuously keep an open and adaptive mind and should consciously and continuously strive to anticipate possible friction points by minute and daily adaptations that will result in the private voluntary organization becoming a real ally and a real source of strength to the public health authorities. Such a faith and such a point of view will ultimately, I believe, be regarded by a rapid and effective development of the child hygiene program in any community in such a way that the nearest possible to 100 per cent efficiency will be secured in a program in which public and private organizations each are playing their well defined and conscious parts. It is often as true today as it was of old that "He who loseth his life shall save it" and in my experience, this is not altogether an unworthy inspirational word for a voluntary child health organization.

**Mr. Folks:** If I were going to suggest any addition to the paper, which would seem to me to be very complete and a wonderful picture of an adapted process of continuing concern, it would be that a paragraph be inserted for the hygienic development of the adaptive mind. That is the only missing ingredient that I find sometimes in developing that line of a situation. I think we have made great progress in the last two or three years in this country in adopting the adaptive mind in the health field. But health is the large thing yet to be done. The discussion of this question of adapting a program to local needs, which is another way of phrasing the old bond of cooperation, in a sense, will be discussed by Miss Dorsey, Director of the Public Health Nursing Association of Pittsburgh.

### DISCUSSION

**Miss Nan Dorsey, R. N., Director, Public Health Nursing Association of Pittsburgh:** On behalf of Pittsburgh and all other communities of similar size or smaller, may I presume or dare to ask you to forget Mr. Buritt's excellent and most interesting paper and New York for a brief fifteen or twenty minutes and come down to thinking in terms of an actual city-wide program.

The day the Public Health Nursing Association opened Headquarters, three years and three months ago, we recognized the need of a child health program. It needed neither a survey or a demonstration to prove the need. The innumerable existing health agencies over the country, this splendid national child health group, have fully convinced us that wherever there is a community of individuals, whether it be numbered in hundreds or hundreds of thousands, we know without hunting for it that we have questionable health conditions. Just how far in extent the positive and negative health conditions might be, would develop as our work progresses. And thus it was, we inaugurated our service from the first day, on the principle of a family health case working group (with apologies to the family case working group).

I am not sure that we asked Pittsburgh whether they preferred straight visiting nursing (bedside care) or infant welfare work, or tuberculosis; nor am I sure whether we gave them an opportunity to say. We simply started out as a public health nursing group with the intention of undertaking any and all phases of public health nursing that might be found in an individual family. We then adopted the plan of elimination, should that be necessary, and discovered but one phase of our service to be eliminated in the city, and that was follow-up medical school inspection, which was under the joint control of the Boards of Education and Health. (School work is being done by our Association in the county.) Although we firmly believe that a well rounded child health program includes the school health problems, we do not believe that actually eliminating the detail of the follow-up school medical inspection has taken us out of the field of school nursing, because well executed prenatal service, infant hygiene, and pre-school hygiene puts us in a position of doing the very best type of school and tuberculosis nursing, affording excellent opportunities for the correction and prevention of the defects of infancy and pre-school from becoming the defects and

disabilities of school children. From the very beginning we talked in positive terms to our staff and to the general public of rendering a community health service, with the family as the unit.

No one realized more keenly than I and my assistants that as soon as we *could* we should have an infant welfare instructor, as well as tuberculosis. In the beginning of our second year, July, 1921, we engaged an infant welfare director, Miss H. A. Bigelow, an infant welfare specialist, to come to us to take charge of the Division of Infant Welfare of the Public Health Nursing Association, whose function it would be to establish well-baby conferences with a medical staff, volunteer service, and to give class instruction to the staff. Miss Bigelow found upon arrival (and I believe, being present, she will verify my statement) a nucleus for the baby conferences, of babies whom the nurses knew well, a staff of nurses eagerly waiting for her, open to instruction, and ambitious to give the babies and mothers with whom they had kept in constant touch, the benefit of the last word in child hygiene. And our staff has accepted this division of our work not as a specialized function, but rather as a part of the daily activity of each and every member of the Public Health Nursing Association.

And now what is the result? Bear in mind that we simply lay before you the following facts as result of the first year's work (July, 1921, to July, 1922).

There were on the staff 72 nurses, who made 146,916 visits to 19,540 patients.

Of these 19,000 plus, patients, 3,327 were babies, with whom the nurses were in constant touch, and 5,254 have been registered at the conferences. We had 144 deaths, or an average of 48 per thousand, the city was 89 per thousand.

Of the 146,916 visits made by the staff, 70,837 were nursing and 76,079 were instructive; of these 76,079, 28,665 were made to babies, one-fifth only being for bedside care. And this is an average of nine visits per baby per year, and 521 plus visits per nurse on babies per year, and 43 visits to babies per month.

To make a concrete example of the service, I will take two of our substations where we hold well-baby conferences and where the amount of bedside care is about equal. Both substations are located in settlement houses. At the Irene Kaufmann Station, with six nurses, 1,516 adults were carried, to whom 17,006 visits were made. In that same district, with the same nurses and during the same period, 498 babies were under supervision and 1,870 home visits were made to them.

In the Kingsley House Station, with six nurses, we find 1,622 adults, with 13,711 visits made to them; and 588 babies under supervision with 1,754 visits made. Six nurses in each station have averaged a supervision in the home in the one instance, 83 babies to a nurse. In the second instance it has been 98 babies to a nurse, with adults making a total average 335 patients to a nurse.

Since the millenium will have been reached before we have either sufficient staff or finances, I believe we would do well to spend time and publicity urging women to attend conference stations for the physical examination and group instruction as well as advice; individual attention and home visiting to be considered always first, but to advocate the former as a close and very important second.

To-day we are holding eight conferences, with an average attendance of 30; Miss Bigelow has an assistant and a full-time secretary. We have a medical staff arranged for by the Pediatric Department of the Medical School of the University

of Pittsburgh, Dr. T. J. Eltrich, Dean. Also a volunteer staff has been organized. The details of our plan can well be explained by Miss Bigelow should there be anyone present wishing to confer with her.

Quoting from Miss Bigelow's recent report: "Most of the work has been among the babies under two years, but we have also carried a few children of pre-school age. These have been selected cases which have especially needed the nurses' attention. The baby who has been cared for in the maternity service is admitted to the Infant Welfare Division when he is five weeks old. The nurse also admits any baby with whom she may come in contact in her home visits. Other social agencies, physicians and in one or two instances, even midwives, call upon the nurse and the conference physicians, to teach the mother the proper care and feeding of her infant. Many babies are referred to our conferences by friends or neighbors. From all of these sources and others, we have had registered with us during the past year 5,254 babies. In July, 1921, 789 completed our list. In July, 1922, the records show the names of 3,318, with whom the nurses are in constant touch. This is an increase of 75 per cent in the year."

In this outline I have not pretended to go into the factors of breast-fed, artificially fed, special diet, and so forth—I have with me figures, if anyone is interested—nor into the question of midwives.

The pre-school child we have not forgotten. This will be our outstanding effort this year.

Though equally as interesting in its development, there is not time to go fully into our prenatal service. An analysis of it in relation to the maternity service has not been made, but will be this coming year.

We discharged this last year as fully recovered 3,183 maternity patients, to whom nursing care was given, and gave care to 2,301 new-born babies. On our visiting list to-day we are carrying 420 prenatal patients.

In the month of September we gave nursing care to 268 maternity patients, of whom 197 had received prenatal instruction—in other words, 73 per cent.

This plan has been instituted but one year, as we can increase our staff, just so much more shall we increase our patients. We have certainly reached our limit as far as number of patients per nurse is concerned, but we feel very much encouraged that with a special supervisor of this service who is also in the capacity of an instructor to the staff, that we can carry on a service that has continuity in its procedure, beginning with the pregnant woman and carrying her through until the child actually passes into the school.

**Mr. Folks:** Miss Dorsey didn't mention it, but I have no doubt at all that our organization and others have tried to assist the public department in educating a public opinion, and organizing a publicity movement, which would help in getting that money some day from those city authorities. Probably one might naturally say, "Well, I have done all I can, but I will have to have the backing and the active participation and help of the voluntary organizations that express public opinion before I can get this money which is necessary to develop a program."

**Dr. Richard Smith, Boston:** This is such a very important part of the child hygiene program that I want to say just two or three words in emphasis of what has been said from the platform this morning. It seems to me that it is very clear from the discussion that we have enjoyed at this session that the child hygiene program is very intimately connected with the general health program. There has been constant reference to the public authorities, to the nursing group, to other organizations and social agencies working in the community. It follows naturally that the person who is developing the child hygiene program must have a very clear vision of the general health program in any community. The child hygiene program is a part and probably the most important part of a health program, but in its development it must be adapted to the rest of the health program, which is being carried on in any given community. It is necessary, therefore, that the agency which will furnish the vision and the inspiration for the development of the work, must be an agency which is directed and guided by an intelligent attitude toward general health matters. It is important for all of us who are in these organizations to inform ourselves about the relative importance of the various features of public health work. There is another matter which has been mentioned but which will bear emphasis with reference to the responsibility of the private health agency. It is necessary for us to see to it that we do not duplicate work which is already being done, and frequently very well done, by other public or private agencies. We must devote whatever energy we have in supplementing in the field where there are deficiencies, and also it devolves upon us to go into untried fields in order that we may develop technic or demonstrate the value of work which has never been done. We cannot expect to get money from public officials to do work which has not been proved to be of value. Therefore, it is essential for us to devote a considerable amount of our time, and it is legitimate for us to spend some of our money, in demonstrating the desirability of doing work along lines which as yet have not shown results and for which funds cannot be obtained from the state or municipality.

**Dr. B. Franklin Royer, Massachusetts-Halifax Health Commission, Halifax, Nova Scotia:** I only want to say a few words to supplement what has been so well placed before the organization by the able executive of the American Child Hygiene Association. I want to supplement particularly what he said about the dental program and to say something only of the dental program as applied to the pre-school age period. I feel that many of the organizations interested in child hygiene are going at the program backwards by starting from the public school, with its large numbers of defective teeth and doing a kind of patch work in a mouth not in a healthy condition. It is fundamentally wrong. If we are going to start to build health positively, we must start early in life and aim to keep it by continually building health.

I have been very greatly interested in the development of our pre-school dental program as part of a general health program conducted by a well trained dentist in charge of this work. We aim to have the expectant mother brought in for consultation with this dentist as well as with the doctor in charge of the prenatal clinic, so that the paedodontist from the dental viewpoint may help impress upon

that expectant mother that unless the kind of food is taken from which sound first teeth may be built, those first teeth will not erupt correctly or be properly enameled and will not hold sound until roots are absorbed and they are displaced in the process of eruption of the permanent teeth. We aim to teach the expectant mother and the little sister and brother that may come along. When the baby arrives we mean to carry that child in the dental clinic from the age of six months to six years, after which we will turn the youngster over to the school dentist. At the present time we have over four hundred and fifty babies coming four times a year for such little treatment as may be applied from time to time, prophylactic for the most part, but the paedodontist's reinforcement of the teaching of the public health nurse and the nutrition worker is carried on in the home in their weekly and monthly visits. We have the extreme satisfaction of receiving voluntary notes from the school dentists, stating they are noting already the improved condition of the mouths of the children who are entering school. I simply take the time to reinforce one particular point, pre-school dentistry.

Mr. William Mather Lewis, Civic Development Department of the United States Chamber of Commerce, Washington, D. C.: I am very glad to have this opportunity of speaking for just a moment. There may flash across your minds a question as to what relation a commercial organization such as the United States Chamber of Commerce can have with the subjects in which you are interested; but obviously American business is very vitally interested in the matter of American public health. Let us say the individual worker—the individual in industry and business—is worth \$1,200 a year, and receives that much pay. That's 6 per cent on \$20,000. And when you destroy that life it is as though you had destroyed a \$20,000 machine or burned down a \$20,000 building. That is a dollars and cents way of looking at the matter of the creation and the maintenance of the best health conditions in this country. We are glad to say that the National Chamber of Commerce has gone beyond that point and looks upon a man not only in terms of his industrial productiveness but from the standpoint of his value as a citizen as well. You realize that the National Chamber of Commerce—and this is where it comes in touch with your particular problem—the National Chamber of Commerce is a clearing house for some eight hundred local chambers of commerce and for some six hundred trade associations. Now, as a clearing house, it has come about that in addition to being the voice of business to the federal government, we are rendering certain types of service to chambers of commerce, trade associations, and individuals.

American business is calling for a broader type of service than ever before. You will remember that the ghost of the miser in Dickens' Christmas Carol, when reminded by a friend that he had been a good business man, cried out in anguish, "Mankind was my business—the public welfare was my business. The dealings of my trade were but a drop in the ocean of my business." The public welfare is my business. That is the way the average chamber of commerce is looking at business to-day. It is saying that the business will come to this community if we can prove that this is a good place in which to live and not as easy a place in which to die. That is sound, common business sense. And so it comes about

that the Chamber of Commerce in St. Louis, and the Chamber of Commerce in Portland, Oregon, and the Chamber of Commerce in Seattle, are advertising the fact of their low infant mortality. That's one of the best business selling points that they can offer to get people to come and live in that community, and nothing else can be offered to a prospective resident in a city, or a prospective business man, or industrial leader more effective than healthful conditions for his family. To render service along lines which make for a strong community life there is in the National Chamber of Commerce a civic development department, which has to do with housing, city planning, zoning, immigration, national civics, and public school education.

Now, in our campaign in public school education, we are issuing a series of pamphlets known as "The Schools of Your City." The pamphlets which we have recently issued on "Health and Physical Education" have created great interest in chambers of commerce throughout the United States to which we have sent it. One hundred and sixty chambers of commerce, through their education committees, have analyzed the health conditions in the local schools and have sent back their findings to us. Among the questions taken up are: Whether or not the schools have school physicians; whether or not the schools have school nurses and adequate nurses to cover the nursing needs properly; whether or not the children are given milk in the morning and afternoon, and whether they are required to have an examination before they enter the school; because we realize that all these things mean the future better business and better industry of the community, and because we realize that the child who is mal-nourished, the child who has had bad teeth and poor eyesight, is restricted in the field of industrial activity in which he should be a strength to the community.

So that I merely suggest that this association realize that the local chamber of commerce is a place with which it should make a very definite contact, and that the local chamber of commerce — 160 of them — are cooperating with us on the health of the school child; and they will cooperate with you just as well on the health of the pre-school child.

May I suggest that the thing needed to-day in this association to get the business men and the children and mothers interested is to interpret your gospel in terms of the movie fan. You can sit in these conventions and work out the technical points, but what we need in America is to have the health of our children dramatized. And you can dramatize health and make it as interesting and popular a thing as anything else. And so we can assure you of the interest of the business men of this country in any well organized health program of the local organization if you can assure us of the dramatizing of our work and bringing it to the American people in terms which the American people can understand.

Mr. Folks: Now I think we must leave the question of the broad subject of adaptation unless Dr. Brown, who has had the biggest job of adaptation out in Mansfield, can gather the cream of his experience in a minute and close our discussion of adaptation. Have you something to say in that field, Dr. Brown? We would like to hear how far you have gotten in this field of adaptation; how far you are "educated" already.

**Dr. Walter Brown of Mansfield, Ohio:** Mr. Chairman, I came to this meeting not to say what we were trying to do at Mansfield, but to listen to what other folks were doing. I feel that our presiding officer has had quite some experience from the point of view of the public official. I have had a feeling for a long time that we have frequently talked about looking for leadership from the official field, but we have not done very much but talk about it. Too frequently the public official is set apart because he is supposed to be a "politician," and consequently we do not feel that they can or should deal with him. I believe this is a serious mistake. Within the last three or four years we have made some progress along this line. As the representative of National Child Health, I have opportunity of trying to adapt and put into a local community a rather complete program for the improvement of child health in cooperation with both the official and voluntary agencies.

I think we all need to get what Mr. Burritt has pointed out to us, namely, the adaptive mind. We so frequently say that we are not going to try to impinge a program on the local community. All too frequently that is exactly what we attempt to do. We go in with our ideas all set that we wish to establish this or that kind of health service. When we go up against the first indication that the local community does not think just the way we do, we seek to find a way to drive through or over the local point of view. Thereby we violate the personality of the community. I believe it is just as harmful to violate the personality of a community as it is to violate the personality of an individual. And just so long as we fail to realize that our communities have personalities to be violated we will have a great deal of difficulty in finding ways and means whereby we can distribute to these local communities our accumulated knowledge of child health.

I feel that we should be satisfied to take this knowledge that has been produced in various parts of the country and slowly and patiently adapt to local needs. If we do this, I am sure we will get the local communities in our country to realize that one of the greatest jobs they have is to build sound bodies in which to place sound minds, to the end that we may successfully solve the numerous problems of our American civilization.

**Mr. Folks:** Our program this morning goes rather over the line of the general to the specific and the concrete. We have thus far gotten our minds into an "adapted" mood, I believe, and realize that our organization as a child health organization must be adapted to the mind of the community, the authorities of the community, and the agencies existing in the community. Now the next phase of the question is, what part is going to be played in the work of such a local organization and how shall it be done by the staff of the organization as a whole or from the volunteer workers, or board of directors. These questions of staff are very vital and oftentimes a very good program comes to naught because of some minor fault of personality which might perhaps have been corrected by the chief member of the staff. And it is very, very important to have that adaptive mind at the head of the staff. Mr. Courtenay Dinwiddie is particularly competent to discuss this question of the Organization and Responsibilities of the Executive Staff.



## **ORGANIZATION AND RESPONSIBILITIES OF THE EXECUTIVE STAFF**

**COURTENAY DINWIDDIE**, Executive Secretary, National Child Health Council,  
Washington, D. C.

Under the title that has been assigned me the whole range of a community's efforts in behalf of the health of its children might be discussed. In fact, it is difficult effectively to discuss the responsibilities of the executive staff of an organization without doing so in terms of a live, growing plan of work. The subject, therefore, is a peculiarly difficult one to discuss in a 15 minute paper.

There have been some excellent contributions to the subject of staff organization and responsibilities. Miss Hunter's pamphlet on office administration for associations dealing with mothers and under-school-age children, published by the Children's Bureau, contains many useful suggestions for all types of child health organizations. Miss Gardner's and Miss Brainard's classics on organization as related to public health nursing are useful in dealing not only with the nursing work in a local child health society but with the whole organization problem. There are many other good books treating of business administration in general. I shall not attempt to duplicate this available material but rather to supplement it in some points which are apt to be overlooked, and, to reinforce some of the suggestions that others have made. Therefore, I hope that it will be appreciated that what I say is by no means a complete statement on the subject, and, in fact, makes no attempt to deal with details of administration.

The threads of a broadly conceived plan of service for children must not only run through every phase of the child's work, play, and life in general, but must lead straight to those conditions and forces in his home and the community in which he lives which are molding his body and his mind, whether for good or ill. However, it should not assume to cover the entire community health problem without regard to the functions of others who are not devoting themselves to child health work primarily.

What are the capabilities that we must look for in the executive staff which is to administer a plan of work which must be so inclusive and at the same time so nicely adjusted in its relationships to other activities? We must seek the qualities of a promoter, a trained visitor, an expert examiner, a research worker, an organizer, a publicist, a lecturer, an efficiency manager, and, last but not least, an administrator.

The demands upon the executive of the pioneer committee or society, which is blazing a new trail for child health in a community practically untouched by health work, call for all of these qualities. For instance, the nurse who goes in to develop a rural service, following a campaign by a local committee, should have the ability of the promoter to stimulate and draw in the various persons in the community who should take part in education, medical examinations, follow-up and relief. She should have the knowledge of the trained visitor who sees the problem of the family as a whole and can help secure employment, develop self-reliance and economic independence, and she should be able to do many other tasks for which no one else is available. She must be able to make school inspections and to know fairly accurately what the standards of medical examinations should be. She should be able to follow back to their sources the lines that lead to disease, malnutrition, and wrong habits of living, and to know whether the remedy is to be sought in an enforcement of sanitary laws, new legislation, education of public opinion, health instruction in the schools, or a combination of these and other measures. She should be able not only as a promoter and a publicist to keep a fund of public information circulating that will stimulate wide interest, but as an organizer to draw people together in definite service. Committees of physicians to help in medical examinations, legislative committees to secure appropriations and better laws, live and responsible health clubs to stimulate better habits of living, local committees on nursing, on relief, and on many other subjects can nearly always be developed where there is the need, and in rural communities practically all community activities may clear through one or two main committees or associations. Beginning as a lecturer herself, such an executive may develop a group of people well-informed and able to keep churches and associations in touch with what the community is doing and should do for its children.

During all of the tremendous demands upon such a pioneer worker she should also be able to analyze her own work from the standpoint of efficiency, to interpret it in figures that have real meaning, that show

permanent results, and to judge of the relative values of the different branches of her work. As she develops interest, stimulates other workers, and sees organized groups coming forward to aid her in the community, she should have all of the qualities of the administrator in holding together these various individuals in a working team that shall produce the best results with the least friction and the greatest participation by each individual.

It is obviously impossible to find all of these qualities in one individual except in the rarest instances. However, it is important that those who select the executive for a pioneer organization should recognize the need for ability along every one of these lines. Community conditions or the stage of development of the work may very often determine those qualities which should predominate in the executive needed for a particular time and place. The pioneer must often combine a capacity for personal service with ability as a promoter to an extent that may not be required of the executive who comes later to build up a strong, effective organization. The latter may supplement his own qualities through the staff that he selects. Also it is important that a board of managers should attempt through the services of their own membership to supplement so far as possible those qualities in which the executive may be lacking and, in developing a staff, should authorize those needed types of service which cannot be expected of the executive.

In a larger community or one in which there are a number of other lines of work already developed we may assume a more ambitious organization with a staff of visiting nurses, part or whole-time physicians, health educators and supervisors of whatever type required, a nutrition worker, a recreation worker, perhaps a publicist, a research worker, an office manager, and other types of workers suggested by the needs of the community and the activities or lack of activities of other associations.

It is hardly necessary at such a conference as this to stress the importance of adequate training and of the right personal qualities of those who are selected for the work to be done. The old plan of selecting a relative, a good friend of one of the directors, or someone who has merely a pleasing personality or needs the position, has been one of the great stumbling blocks in the path of progress in child health work. Also it is hardly necessary here to emphasize the importance of adequate pay for services rendered. Boards of managers must free

their minds of the idea that those who do humanitarian work, the highest type of service possible, should do so upon a diet of bread and water. However, when we secure people who have a thorough technical training let us be sure that they know that there are other phases of health work than are to be found in their own special fields. It is important that every member of the staff, including the executive, should have a clear view of his own limitations and of the importance of the contributions which the others have to give. It is important that the executive of such an organization should have the keenest appreciation of the contribution that each of these types of workers can make to a virile and thorough-going program, whether he himself is performing any or many of the functions suggested or not. In addition, he should also have the qualities of that new and not yet well-classified species of humanity — the coordinator.

I doubt whether I can contribute much that is new to a discussion of sound administrative organization from the point of view of simple assignment of functions, supervision of work, and systems of record and check-up. However, I should like to point out a few of the larger issues which I believe should govern the consideration of staff organization and responsibilities.

The planning of health work for children should be of the broadest. In the first place, the time has come when we can no longer think of child health work in terms merely of a nursing program, a nutrition program, a health education program, or any other phase of such work. The proposed amalgamation of the American Child Hygiene Association and the Child Health Organization of America is sufficient evidence of this new conception of the importance of a broad, unified effort in behalf of our children.

We cannot pay too high a tribute to the nurse who day after day, in all kinds of weather, in crowded tenement or over lonely mountain roads, gives that type of personal service which has been one of the most fundamental things in our health development in this country. We must never forget the corner-stone of our national life that is being laid by the teachers through the information, stimulation, and training for right living which they are giving to our children in the schools. This sort of personal service is fundamental. At the same time it too often is confined in a narrow or even a narrowing circle of education or service along one particular line and also does not reach all of the community or drive at important community conditions that may loom

larger even than the habits of the individual in the health problem. Broad planning that covers the whole range of healthful living and takes account of all the factors in the home, the school, and the community, that make for good or ill health, is essential. In such planning it is necessary to bear in mind that the health programs of the community must be considered as a whole and that child health work must fit in with other health plans or else it is subject to the same criticism as are special phases of child health work which do not take into account the larger problem.

In order that there may be intelligent planning it is necessary that the executive or some member of his staff, or both, and also members of any executive board or committee, should have free time for careful studies of the work that is being done, results that are being secured, and conditions that exist in the community, and those things that need to be done next. There is nothing much more pathetic than the organization which conceives its main object to be to prove that it has done a marvelous amount of work and which is afraid of any real analysis of the effectiveness of its service and hardly dwells upon the big, untouched problems ahead of it. If a committee is pouring an enormous amount of energy into health work for children, when it knows or should discover that the children are receiving contaminated milk, and does not attempt to correct that condition, the justification for its existence is questionable. If it is reporting an unprecedented number of visits per nurse and yet is not holding the interest and improving the habits of life of the mothers and children that it is serving, it has fallen down woefully in its analysis of its work. If it is failing in any respect to discover and deal courageously with serious causes of lack of good health it has a grave responsibility upon it.

A type of organization with which most of us are familiar is one in which much excellent personal service is rendered by visitors of high ideals, warm, human sympathy, and untiring energy, but which somehow fails to meet more than a small portion of the demand for its services. Very often it will be found that this organization has developed from the services of perhaps one or two nurses into one with a larger staff and a number of activities, with very little attempt at systematizing and organizing its work. It is in such a case that the excellent suggestions referred to before, for office management and for improving and systematizing the work generally, are most helpful. It requires a high type of skill to develop the kind of record keeping that makes informa-

tion easily available, study of results practicable, and follow-up of service to individuals more consecutive and thorough.

Much time may be wasted by nurses in clerical work, or confusion may exist as to proper assignment of duties, which can be corrected easily through systematic planning and training in effective methods. In fact, the work of every member of the staff should be so arranged as to be a continuous course of training.

Some of the most conspicuous failures are often found in the field of community education. Too often the worker assumes that she can carry the entire burden herself. She does not appreciate the importance of a public opinion that will back her up. She does not realize the great possibilities of organized groups of teachers, physicians, workers, and citizens generally in carrying forward a program that is beyond the capacity of any one individual. I understand that there are nurses in rural areas who seldom visit a community without their whole time there having been anticipated by a local committee or representatives who have arranged for conferences, lectures, inspections, and so forth. In one town where single-handed efforts to introduce child health work had been futile, the coming together of various local civic organizations in a community council so focused public attention on the needs of the community that county agencies were unable to supply the demand for their cooperation and a local staff was sought at once.

The development of the Farm Bureau movement is an excellent illustration of the vital importance of community education and organization. Originating in the South, as the result of the boll weevil menace, the county agents were then sent into other counties as part of a general plan to extend agricultural education directly to the farms of the country. It was soon evident that an outsider, no matter what his education and training, lost most of his effectiveness when working independently. The development of Farm Bureaus, planned democratically to include all farmers in their membership, was a next inevitable step. These bureaus are increasingly assuming responsibility for trying out new methods in agriculture, for stimulating community interest, and for seeing that the knowledge that the agent has issued and applied throughout the county which he serves, as well as for guiding him in his work. Undoubtedly these democratic methods of broadening the base of community responsibility are one important reason for the rapid and wide development of Farm Bureaus and for the large

part that they play in agricultural education and in community and national life.

In spite of the discussion that has taken place during the last ten years we are really just beginning to deal in a thorough-going way with the problem of proper relationships between health work for children and other community activities. There is no greater responsibility that rests upon the executive staff of a child health organization than that of seeing the health problem of the community as a whole, not only as a health problem but in its relationships to education and every other civic question. Such a vision must be followed by a practical stimulation of public officials, private organizations, and citizens to carry on needed work that is not being done and to weave all of these activities together into a community health program. It is here that the ability to correlate is essential. But that is a subject that needs an entire morning for adequate treatment.

Just one word as to participation by individuals. As in the case of the Farm Bureau, it helps greatly to have those whose work is to be made efficient take part in the studies and development of plans which are to produce the results. Violent opposition on the part of a nursing group to a tickler system of following up patients has been changed to ready appreciation through a study of their own patients, of whom they have lost track through lack of such a system. No matter how technical or specialized the work of any individual may be it is important that he or she be brought into the consideration of problems of other staff members and of the whole organization so far as this is possible. Broader points of view may be obtained through attendance at conferences, lectures, through visits to other communities, and similar opportunities to rise above the performance of what may otherwise become a routine task.

There is a growing appreciation all over the country of what a man-sized job this service to mothers and children is. The responsibility for seeing that no stone is left unquarried which may help in building up our future citizenship is appreciated to-day as never before. To meet this awakening demand with field service, helpful counsel, and guidance that shall be united and far-reaching is the inspiring opportunity that lies ahead of us.

## DISCUSSION

Mr. James A. Tobey, National Health Council, Washington, D. C.: The qualifications which Mr. Dinwiddie has so excellently summarized are those with which I think most everybody will agree. The general public and public officials are impressed by the things in the child health movement which they can actually see and one of the things which they can most certainly visualize is the personality of the executive.

We agree with Mr. Dinwiddie, then, but we should like to ask where are these executives to be obtained? If we could put Dr. Browns throughout the country we should be all right; but we cannot obtain that type everywhere. The schools of public health with the big endowments, Harvard, for instance, with its two and one-half millions, starts off this year in a burst of glory with twelve students. Johns Hopkins, another big endowment, has a few more, fifty or seventy-five. The University of Pennsylvania, the pioneer, has a half dozen. The Massachusetts Institute of Technology has a score perhaps. Something must be done to stimulate the training of executives in public health fields. As Dr. Smith has said, the man who has general training will make the best specialist. We know that is true in medicine; the general practitioner generally makes the best specialist. That goes for executives in public health also.

With regard to nurses, there are, of course, many schools of nursing and of public health nursing, but I am informed by Miss Fox of the American Red Cross that if they could get five hundred public health nurses right now they could place them throughout the country. So that seems to show that there is a great demand for public health nurses and visiting nurses, just as there is for the executives in public health.

I believe this is one one of the big problems, the turning out of adequately trained personnel in public health, and that it applies to child hygiene more perhaps than to any other one phase of public health.

Mrs. Ira Couch Wood, Elizabeth McCormick Memorial Fund, Chicago: Mr. Chairman, may I add just one word to what Mr. Dinwiddie has said and make a plea for two things: First, for the definite training of an assistant to an executive, with the idea of assuming his or her position in time of emergency or to head the organization should the directorship change. There should also be definite training of members of the staff to assume added responsibility at times.

Second, I urge that time should be definitely set aside in every organization for staff conferences. I appreciate that this is very hard to accomplish in the crowded lives of most executives, but I believe the resulting benefit is well worth the effort. Time should be given to each member of the staff having a share in administration to express his views and experiences; to consider the different aspects of the common service, accomplishments and problems, and the result in better understanding of the work as a whole, and in a valuation of each member's services to the organization, will be incalculable. It is also well occasionally to include in the conferences or in social gatherings, every member of the working organization from the president of the board to the smallest office boy. The *esprit de corps* developed in this way is a definite asset for any organization to covet.



The Elizabeth McCormick Memorial Fund recently moved its offices in Chicago from a downtown business location to a substantial old house in a quiet neighborhood, with the most satisfactory results. This plan should work particularly well with social welfare organizations, as giving more space, more quiet, greater freedom from unnecessary interruption and a chance to create a little different atmosphere for work than a crowded office building can possibly afford. We have found that we had room for staff meetings as we never had before, and at intervals we have gathered together every individual associated in any way with the work and have found that the interest has been immeasurably quickened as a result.

I do recommend the old house to child welfare organizations because of the saving in rent, of its possibilities for many things not usually included in the business program but valuable as by-products nevertheless; also for the opportunity it affords to make the work of the organization better known to the public, through space for exhibits, etc.

## METHODS OF RAISING MONEY

RAYMOND CLAPP, Associate Director, Welfare Federation of Cleveland

The best way to raise money for a private philanthropy is to ask for it outright from persons sympathetic with the aims of the agency and intelligent as to its program and methods. The average contributor does not approve of the methods so much in vogue in recent years by which organizations, some more and some less worthy, seek to get money out of him by methods of painless extraction such as the tag day, the bazaar, and the amateur theatrical. These methods of enticing the dollar from the general public have their attractions, however, for the board of trustees whose members "hate" to ask anybody for money.

In considering any method of financing, an agency should keep in mind the necessity for assuring a steady income, increasing from year to year to keep pace with the healthy growth that attends any live organization doing a needed work. This should come as a result of increasing conviction on the part of larger numbers of the need of the work and effectiveness of the agency. The great objection from a financial standpoint to the entertainment method of raising money is that the proceeds fluctuate from year to year without reference to the amount needed or to the value of the work, but depend upon such things as the weather, or the existence of other attractions, or the number of other similar enterprises competing for favor, and so forth. If an agency puts on a clever stunt and makes a lot of money one year, that stunt is sure to be copied by other more or less benevolent institutions, so that the agency which builds up an organization and renders a service on the basis of the proceeds of a successful venture may find its work greatly crippled the next year because the novelty of the stunt has worn off. The tag day in its infancy had a number of good points. It advertised the name of the organization to a large number of people, and where the organization was well and favorably known, the force of public opinion assisted in increasing the number of contributors because to wear a tag was the right thing to do. The recent experience of New York indicates how that idea has lost its value because of the multitude of questionable projects which have used the attraction of the pretty girl to wheedle small change from the passerby so that every

day is tag day in some cities. If for no other consideration, this method is condemned because of the moral effect of asking nice girls to parade the streets and approach all kinds of men for the favor of a contribution.

"But what are we going to do?" you say. "People do not answer our letters. We can't get our boards to work and our own time is so taken up with the daily task that we can't afford to pay attention to getting money."

In the first place you should take stock of what you have to sell, looking at it from the point of view of the contributor. As to the form of organization for instance, there are certain minimum standards which the average business man has been educated to look for in an agency making an appeal. The first of these is, "Does the agency fill a need not already well filled or capable of being thus filled by an existing agency?" The need for study of this point is most essential in the health field where so many agencies are trying to do the same sort of thing in a similar way, working through the same channels. The next point, "Is the organization under the control of, and does it have the personal attention of a representative group of local citizens?" and third, "Are its affairs managed in a business-like manner without waste and with a full accounting of funds contributed?" While these points may seem far afield from a consideration of methods of raising funds, they are vital to the establishment of a solid foundation for any money raising effort. If you are sure that your organization is sound and your agency is needed, your next step should be to put down in black and white a clear and concise statement of the evils that need attention, your program for attacking those evils, and the financial cost of that program. You are then ready to attack the prospective donor. The securing of prospect lists is comparatively simple. In the first place you and your board will know of people who have had contact with your work or who have indicated an interest in the kind of thing you are doing. Such people have only to be convinced that your program is wise and your organization effective before contributing. Your lists of prospects can be increased through the study of club membership lists, lists of contributors to other philanthropies, and public records of property ownership. A list of owners of high grade automobiles is very helpful. The tax duplicate will disclose the owners of valuable property in business and residential districts; lists of officers of industrial and mercantile establishments can be secured, and there are commercial agencies which make a business of furnishing lists of wealthy persons. In such ways as these a list of almost any size can be built up of people able to give.

The methods of securing their interest are many. By far the best method is to enlarge the list of volunteer workers because such volunteers become deeply interested themselves and tell all their friends, and an interested worker is the best possible publicity agent. Personal talks to clubs and other groups are important. Pamphlets, circulars, and periodicals are helpful if read, but how much of the literature that comes to your own desk do you read, especially pertaining to interests not closely connected with your own? The newspapers are the cheapest and best mediums for reaching the community as a whole. As a rule they will be found interested in your cause and willing to help you along if it is within their power, but you must always remember that the newspaper is an agency for the dissemination of news, not propaganda. If you can furnish news items that carry your message you can get all the cooperation from the newspapers you need, but the average social worker in dealing with the newspaper is too much concerned because the editor does not get the social worker's viewpoint when he should be concerned because he himself does not understand the rudiments of the newspaper game.

One of the advantages of the campaign — no matter whether it is a campaign for funds or for weighing babies or something else — is that if many people are working in your campaign it is a matter of real news value which, if properly handled, can carry much of your story into the news columns.

When it comes to the point of asking for the contribution, nothing can be more effective than a personal face to face request made of the prospect by someone in whom the prospect has confidence and who can speak with authority about the needs and effectiveness of the organization. Here again the campaign is valuable because, while it is practically impossible to get the average board member to make a personal canvass for contributions during the course of the year, if a definite period is set aside when a considerable number of other people are doing the same thing for the same purpose you can get your board member to take a list of names and personally canvass them. Personal calls by paid solicitors are very expensive and bring the agency into disfavor if the solicitor is working on a commission basis.

Outstanding examples can be given of agencies with executives who are good salesmen, where those executives have been able personally to secure large contributions, but such executives are the exception

rather than the rule. Agencies doing work in professional fields should be able to select their executives for professional standing and ability rather than for money-getting powers.

To reach any considerable number of prospects other than by the campaign method the agency is forced to the use of the mails. With any given amount of money to spend in a mail campaign it is much better to carefully select your list of prospects, putting considerable study into a follow-up series of communications so that a few people may be thoroughly canvassed rather than that a large number may receive a single appeal. Whatever else you do be sure to thoroughly cultivate your present contributors, deepening their interest and strengthening their support.

From a speaker coming from a community fund city and speaking on a subject such as this, you doubtless expect some word about the community fund as a method of raising money. I want to admit without hesitation that I think it is a good method and that it has been successful in Cleveland. Some of the reasons for that success have been hinted at in what has been said. In the first place most careful study has been given to the ills that exist, especially in fields of health, recreation, relief, and child care. Programs have been worked out endeavoring to assign needed tasks to the existing agencies to the full capacity of those agencies and in such a way as to eliminate both overlooking and overlapping. This has been chiefly accomplished through organized functional groups such as the Health Council, the Recreational Council, the Children's Conference, and committees on illegitimacy, boarding homes for girls, and through better use of the Social Clearing House, and so forth. We have found that by bringing the agencies working in allied fields together to study their common problems, duplication is gradually but automatically eliminated. As a result of these studies a statement of needs can be presented to the town, with a program for meeting those needs and the cost of that program given in detail.

We expect tomorrow to have a final meeting of the Community Fund Investigating Committee to recommend the budget for 1923. After two solid months of committee meetings and conferences in which every agency had an opportunity to explain its needs to the budgeting committee and an opportunity to appeal from the recommendations of that committee in case those recommendations were not acceptable. We are therefore prepared with a clear and comprehensive statement of

the work to be done next year and the cost of that work, which will be published broadcast before contributions are solicited.

Our list of prospects is so comprehensive, and our campaign organization so thorough that practically everybody in Cleveland and its suburbs will be given a personal invitation to contribute by some neighbor or friend or fellow worker who is prepared to show why the money is needed and what will be done with it. Approximately 8,000 volunteer workers will be enrolled in the campaign organization and will go out into the community to spread the gospel of the Fund. The way will be prepared for their solicitation by news stories and paid newspaper advertising, by posters covering the town, by a moving picture exhibited at all movie houses, and by an organized group of 200 speakers who will reach clubs, churches, and other gatherings throughout the city during the month preceding the campaign. This publicity is so planned that the Community Fund will be the biggest thing in town during the week of the campaign. Everybody will know about it and everybody will expect to be solicited. Because of the cumulative effect of previous campaigns the people of Cleveland pretty generally know about the Fund and are interested in it because it has been brought home to them. From time to time throughout the year they have been reminded that there is a Community Fund as one or another of the participating agencies has touched their lives. There are few persons in town whose lives are not touched in some way by a fund organization. So the way has been prepared for the solicitor.

The prospect may not always be satisfied that he should contribute but at least he has given the matter some thought, and an interested prospect is much more hopeful than one who knows nothing at all of what you are trying to tell him about. Of course we have heard that people are getting tired of campaigns and that any organization which depends on that method of soliciting funds is doomed to failure, but those persons have been familiar with communities where campaigns follow one another week after week, and constant repetition at too frequent intervals of any good thing will spoil one's appetite. We all believe that the Community Fund Campaign has a long life ahead of it in Cleveland because it is the one big campaign of the year, and because Cleveland is proud of this great benevolent organization that unites all of her citizens regardless of race, creed, color, or condition in a great universal service to the less fortunate of her citizens.

**Mrs. Perkins, New York City:** I would like to ask Mr. Clapp to emphasize a little more than perhaps some of us gathered from his paper, the feature of interesting people who are the small contributors. I know that the Cleveland fund does that, but from the fact that he started out by describing the securing of lists of people who could afford to pay largely, I thought perhaps it would be nice if he would be willing to tell us a little more about the way in which the small donor was interested and really does give.

**Mr. Folks:** And perhaps something about the proportion to the total if you happen to have it at hand — the proportion that comes from the small contributor.

**Mr. Clapp:** First, as to the way in which we get contributions from the small contributor: Most of those contributions come from the industrial division. Our policy is to reach the contributor at his place of work rather than at his place of residence, because you can reach him more easily and you can get results. Generally it's the man, or at least the one who earns the money, who makes the decision. You don't have to get his wife at home and have her promise to talk it over with her husband when he comes home and then tell you afterwards about it. Of our 300,000 contributors 140,000 are school children, so that when we talk about the actual number of contributors we generally speak of the 160,000 who are people who give one dollar or more. Of those, about 130,000 give at their place of work. Our industrial division organization is composed of a "key man" at each plant, someone who is designated by the plant organization to represent the Community Fund in organizing the solicitation in that plant, and who is responsible for securing the contributions. And we secure speakers. The larger part of the task of the 200 speakers is to go around to the various industrial plants and tell the workers about the Community Fund and answer questions. We also have a district organization with a team in each ward and precinct of the city. They do not make a complete house to house canvass but they come very close to it. One of the largest sources of our list of prospects is the list of all the automobile owners in town.

**Mr. Folks:** How do you avoid soliciting them twice, at business and at home? Or do you do it twice?

**Mr. Clapp:** We cannot avoid that entirely but the district organization solicits entirely by card. We will have some fifty thousand cards and prospects, and wherever possible the prospect's factory organization is given a blue card, indicating that the industrial division is not to solicit that man who is to be reached at his residence. That cannot be done in every case and it is not essential that it be entirely avoided.

**Mrs. Gordon W. Colton, Maternity Center Association of the Borough of Brooklyn:** I want to add a plea for eliminating entertainments as a method of raising money. A business enterprise that meets the need of the public, as well

as supplying funds from its profits for a charitable organization, is possible. It has worked out successfully in Brooklyn.

I speak of this enterprise because I believe the method could be used anywhere. We started without capital and only two months' rent donated. The equipment was also donated and after the first two successful months, three more months' rent was promised.

From January, 1922-1923, the Maternity Center Association of Brooklyn will have received from "The Center Shop" \$3,000, and still leave enough working capital in the shop's treasury. This in a year when business conditions were uncertain.

There are three good results from this method of raising money:

1. It means sustained effort on the part of a board instead of spasmodic efforts in temporary committees arranging entertainments which may or may not be successful, the success dependent upon weather conditions, the ability of the chairman, and the happy or unhappy choice of entertainments. Sustained effort with pledged time for the year is less tiring and more satisfactory to those helping a cause.

2. Increasing income resulting from a successful business instead of an uncertain income from entertainments.

3. Continual advertising of an organization. The Center Shop, a specialty shop for women's and children's apparel, at 151 Pierrepont street, Brooklyn, has only one paid worker—the manager; the buyer, saleswoman, and accounting department are chosen from the board of directors and center committees of the Maternity Center Association, assisted by members of the Junior League.

Mrs. Charles F. Neergaard, the president of the shop, has proved her theory, that the public can support a charity and receive value for their money.

**Miss Mary S. Gardner, Superintendent, Providence District Nursing Association:** A method has been successfully tried in Providence for building up a small permanent fund. So-called anniversary days have been inaugurated by means of which special days may be commemorated by anyone through the gift of \$100. This same provides for the services of one nurse in perpetuity on that day each year. Children's birthdays, marriage anniversaries, dates of incorporation of business firms have been commemorated in this way. On the morning following the commemorated day a detailed account of the actual work of a nurse is sent the donor.

I would also like to say a good word for the despised tag day. Nothing is worse than a poorly conducted one, but if a tag day becomes an annual affair, if it is made truly educational, if it is properly organized and safeguarded, it may be made a very valuable expression of community spirit. For fourteen years we have had an annual tag day for the Providence District Nursing Association, and we count on about thirty thousand dollars in receipts.

**Miss Elmira W. Bears, Public Health Nursing Association, Louisville, Ky.:** I would like to speak from the point of view of the public health nursing association that is in a community chest. We have found that we not only are



relieved of the financial problem, the problem of raising money to a great extent, but that there is another advantage in belonging to that chest. With other organizations sharing a common pocketbook, sharing a common interest, we become an integral part of the community in a way that would be difficult to attain outside of a community chest. It has been a tremendous value to us in our work to have the understanding and close relationship of the units that are doing social work of the community, and we do not feel that we lose the interest of the people in our individual work by being a part of the larger group. People can give contributions to any organization they designate, but our board works just as hard for the whole amount as for our individual needs. We are convinced that there is much more than the money-raising idea to a community chest; more and more we value that closer interest and more complete understanding of one another's problems as well as the elimination of duplication of work and effort.

## **NURSING AND SOCIAL WORK**

**MARGARET STACK, Chief, Division of Public Health Nursing, Connecticut State  
Department of Health, Hartford, Presiding**



## EDUCATION STANDARDS FOR CHILD WELFARE NURSING

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In discussing the question of educational standards for child welfare nursing we will consider two questions: first, what we mean by education, and second, the special knowledge needed in the field of child welfare nursing. I am going to use the words "child welfare nurse" and "public health nurse" practically interchangeable in this discussion because I consider that the welfare of the child is entirely dependent upon the welfare of the whole community and vice versa. There is doubtless a certain amount of rather highly specialized subject matter, methods and technic which the child welfare nurse needs particularly in her equipment—but these are in addition to her need for a general all around background of knowledge in respect to the field of public health nursing as a whole.

In considering the question of education, I am using the word as quite an opposite thing from mere "training." Dr. John Dewey says "the purpose of school education is to insure the continuance of education by organizing the powers that insure growth." We must keep this fundamental aim of education for the normal person constantly in mind, no matter what the subject matter may be, or for what work we may be preparing such person, if we desire her to continue effective through life.

The same idea of growth or growing power, as a thing fundamental to an effective or happy life—has been expressed by Dr. Taylor in his recent book "The Stages of Human Life" from an entirely different angle. He says "Our muscles grow weak, our hair comes out, our skin wrinkles, we become bald, we sometimes loose our teeth, sometimes become a little dim in sight, sometimes a little hard of hearing, yet our minds can and should develop the riper and fuller with every year we live"—and adds "This part of personal hygiene is called development hygiene."

Doubtless many of us have considered that this ability to grow is an entirely individual matter, depending more on the heredity of the individual than upon the circumstances of his environment or education. But this is contrary to modern educational thought. The application of right teaching methods to subject matter of fundamental worth, which inspires the interest of the student and gives him a strong purpose to accomplish will produce this growing type of mind.

It is therefore our problem to adopt such methods of teaching and to use such subject matter as will give not only the required specific knowledge, but will also produce an individual growing and developing in and through her work.

Now let us consider briefly the field of public health nursing as it appears today. Dr. Eugene Kelley of the Massachusetts Department of Health has described the field of public health as divided into three areas. The first was that of sanitation in which environment was the chief consideration. The second that of communicable disease in which the germ was the chief consideration. The third and present area, is that of hygiene with its emphasis upon the education of groups and upon individuals. While this analysis is true in general we must remember that we are still pretty much involved in the problems of all three areas.

Mosquitos which bred by the million in the water tanks on the tops of apartment houses in New York City last summer threatened the health of that city. Those of us who know of tenement conditions in that city (by tenement I mean houses of any sort containing two or more families) know that the problem of the extermination of vermin is as yet an unsolved one. In 1850 New York had an epidemic of "relapsing fever" which is caused by such conditions. Is it going to be necessary to have such another before we learn how to keep our tenements clean? Communicable diseases of all sorts are by no means properly controlled, much less eliminated. Now we are considered to be in the area of hygiene with its innumerable problems of individual and group education for healthful living. The public as a whole is only partially educated along any of these lines. The attitudes of minds of people, lay and professional, often remind me of an incident which occurred in an English class.

A question was asked which brought forth an answer which affected the instructor thus wise: Putting the figures 1915, 1910, 1900, 1850, and 1775 on the board she said (there were about 40 students in the

class) "Well I suppose there are about five of you here—pointing to the year 1915; about ten of you here—pointing to 1910; about fifteen of you here—pointing to 1900; about five of you here—pointing to 1850; and about five of you here—pointing to the year 1775." That is much the way I feel in regard to this problem of the nurse in the public health field. She has to meet the educational demands of persons and she has to meet situations in these different stages of development.

Let us consider now the question of the equipment of the nurse from the average training school both in regard to actual subject matter taught and the method employed in the teaching. In discussing the training of nurses one is sometimes led to believe that there is "nothing good" in it. But I believe that there has been much of value both in the subject matter taught and the method of teaching.

In a hospital of any size there is always a considerable wealth of clinical material—and in the case of the nurse, her duties aside from learning to care for the bodily needs of such ill persons, bring her very closely into contact with the facts of *human nature*. As a basis for sound reasoning this is an invaluable experience. There is no sound reasoning based upon anything other than the actual knowledge of *what we are*. Dr. Taylor from whom I have quoted calls such experience—"the experience of humanism"—and adds "These experiences are necessary as the smaller foreground of our lives and the distant experiences of naturalism as the larger background."

The constant application of knowledge, the putting of the knowledge which has been given into constant practical use, is of sound educational value to the nurse. The knowledge of medicine, surgery, pediatrics, obstetrics, and so forth, which has been taught has helped to produce an effective agent both in the care of illness and in its prevention.

The things which are "concurrently learned" in the training school of the past and present have frequently been of good educational value. By things "concurrently learned" I mean those things which are taught irrespective of the actual subject matter of any course. For instance a student is learning to like or dislike school, during a geography lesson. He is learning to be accurate or inaccurate according to the method of questioning employed. He is learning to do his best or only enough to "get by," according to the teacher's knowledge of how to stimulate him to his best.

I remember some learning incidental to an arithmetic lesson when I was in the fourth or fifth grade in school which has made this fact of "concurrent learning" vivid to me. We had been given some examples in division and I had been kept after school to finish them. I was tired and restless and was having quite a miserable time. I looked at the teacher—she looked tired too. It flashed through my mind that she was probably too tired to check up my answers, and so I stopped trying to divide and simply wrote down any figures that came to my mind—in the quotient and example—and quickly handed the completed paper in and fled. My supposition was correct. She never looked at my paper. And I do not believe I have outgrown what I learned then to this day.

Some of the "concurrent learning" in a nurses' school results in a sense of orderliness; in readiness to meet difficult situations and to do things generally considered unpleasant; the knowledge that there is nothing menial in service (or unfortunately in some instances the adverse of these things according to the way the demands of the school have been made and carried out).

Although at present much more scientific knowledge is being given to the student than formerly, the need for more science as the solid fundamental background for the work of the nurse as an expert and teacher, is greatly felt. This material is needed not only for the actual work which she is called upon to do but also for her own development in and through her work.

Aside from a larger background of scientific knowledge and intelligent interest and knowledge of experimental work, the nurse in her training school needs particularly more and better opportunities for work in pediatrics, child care and child development, both normal and abnormal, more and better experience in obstetrics, with emphasis upon prenatal care and instruction. She needs sound knowledge of mental development, mental health, mental illness, more knowledge of the care and technic of communicable diseases, more knowledge of hygiene both in relation to her own health and conditions of living and that of her patients, more knowledge of the social and economic aspects of health work, more knowledge of nutrition and of the special fields and activities of all health workers.

Most of these things can and should be taught in the fundamental nurse courses. The recent report of the Rockefeller Committee has made clear that certain changes in the economic and academic status of

schools of nursing must be made. Nurses cannot be educated to adequately meet the needs of work which is already making demands beyond their equipment, if their education is conducted as a mere adjunct to the administration of a hospital. There must be an ever increasing number of properly trained teachers, who can apply the modern teaching methods in schools of nursing. This to my mind is the greatest need in our schools. We have the material upon which to work but the use of this material is the essential point. The Rockefeller Foundation urges a minimum of high school education as the fundamental educational background and recommends the five year course which gives opportunity for a broader fundamental education. Our obligation as nurses, already outside of the schools of nursing, is to work through our organizations especially through our alumnae associations for the accomplishment of better educational standards in the school. As alumnae associations we should function in bringing to the attention of those administering the schools of nursing the needs of the field as we see them. We can also serve in educating the public to its own nursing needs and how they can be met.

For those of us already in the field there are postgraduate courses which have in mind two things; to stimulate the growth of the individual and to give opportunity for the study of modern methods, organization, research. All of us need to keep in mind for ourselves and others that there is considerable value in short courses, summer schools, even in correspondence courses, in individual reading and studying. A participation in organizations, nursing and other, is of educational value to all of us. Experience in the different fields under expert guidance also has value.

The minimum standards in the field of child welfare nursing will of necessity depend upon the resources and material available in any given community. First, we want women of good home education and character; then we should consider the professional education, which we have discussed. Academic background is of next importance and we should aim at least to obtain the high school graduate. Postgraduate courses should be added as a requirement as soon as possible. Each community and each organization should have a program for raising standards along these different lines as rapidly as possible.

The maximum standards, I need not say, must be set by each individual for herself. Nothing is too much to bring to this field of endeavor. It can use effectively every bit of knowledge that any of



us can bring. Finally we must depend upon the educator, the expert in his field, to teach us the sound methods of using the material of which we have need in our work. We can depend upon him only to show us how to produce in ever-larger numbers the personalities which will meet the needs in this remarkable field of activity.

### DISCUSSION

Miss Mary Gardner, Superintendent, Providence District Nursing Association: We are no longer groping in the dark in regard to the question of education. A thoughtful and extremely able report is in the process of publication written by Miss Josephine Goldmark for the Rockefeller Foundation Committee, which was appointed two years ago to study the question of nursing education. This report will give us in its results the latest opinion of experts and we shall have something definite toward which to work.

When this committee was appointed, it was hoped that some royal road to knowledge might be found and that it would be found possible to greatly abbreviate the period of a nurse's training. The committee has apparently not found this possible and the recommendation is, I believe, to be for such rearrangement of the hospital curriculum as will eliminate for the student all noneducative procedure and all noneducative repetition and will in this way save to the student nurse a certain amount of time. Even under these conditions, however, I understand that the recommendation of the committee will necessitate a two years' and four months' course in a hospital training school with an eight months' postgraduate course in public health nursing for those who wish to enter the public health field.

Such changes, however, do not take place rapidly and meanwhile we must do our best with the groups already entering the field and those who will enter it not so equipped.

The postgraduate course as now offered is unquestionably the best door of entry. For those to whom this is impossible, definite instruction and teaching may be carried on in the city staffs. For the nurse working alone, much excellent literature is now obtainable and short summer institutes are of the greatest help.

The most important point, I am sure, is that everyone should feel the need of further education for her work and do all within her power to obtain it.

## BEHAVIOR PROBLEMS WITH THE PRE-SCHOOL CHILD

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A child was brought into the doctor's room at a pre-school conference for his physical examination. The doctor was a mild, gentle-looking doctor, quiet and very well behaved, nothing terrifying looking about him. He did not wear a white gown, his stethoscope wasn't in sight, he didn't even wear large, round, shell rimmed spectacles. It was a perfectly innocuous looking room, quite home-like in fact, for it happened to be a little practice kitchen in a settlement house, because pre-school conferences will tuck themselves in anywhere that it is convenient, in order that they may be within reach of the people who need them, and the child looked neither terror-stricken nor terrifying. The stage was set for a comfortable physical examination. But in a twinkling the scene was changed. With the first overture from the doctor the child became a screaming, kicking, scratching, biting, fighting creature, resisting with all his strength, he knew not what, but resisting, nevertheless, and for the moment rather effectively. The mother scolded rather shrilly first, then administered a few cuffs, and then was going to give in and go away without having the child examined.

How often have all of us, who have worked in children's conferences, dispensaries or hospitals, been witnesses to similar scenes in a greater or less degree, sometimes with the element of fear entering in because of the strange surroundings, but sometimes not. What, too, has been our reaction to the scene? Have we not met the situation just as one of the disagreeable incidents of the day's work, put through the physical examination, if the mother would allow it, and then dismissed it all with the unthinking comment, "That child ought to be spanked." Whether or not that was the right method with which to meet the situation does not concern us for the moment. The thing that does concern us is the fact that preventing such occurrences, or at least dealing with them wisely if they do occur, is just as much a part of a well-rounded child welfare or even child hygiene program as preventing malnutrition

or tooth decay or diphtheria or any other of the preventable ills of childhood. They are *children* with which we are concerned, not merely tonsils, and legs, and stomachs, and as such must be treated "in toto" and not as separate parts.

Shall we strive and struggle for a healthy body and ignore the mind which is the driving power within that body? The machine, perfect in every part, can be driven to destruction and spread destruction in its path if the mind at the wheel is distorted and warped. "The healthy mind in the healthy body" should be the slogan of the child hygiene worker, for one without the other is an undesirable thing and does not augur well for the future. It would be folly to build a race strong of body with a twist or kink in the personality that would later mean an abuse of power. And the twists and kinks begin early. The child's mind does not begin to grow and develop at school age. From birth to seven years is a period of rapid brain development. The child is acquiring impressions and reacting to them in rapid succession and they are all having their more or less permanent effect. It is the threads of the warp of training which must be drawn straight else the woof of experience woven into that foundation will make an imperfect fabric. The child will become an adult not quite fitted to meet life successfully, but hampered in some way by a habit which mars his efficiency and peace of mind such as the habit of unfortunate emotional reaction, or by the lack of a habit which would have dismissed into the realm of the subconscious something which must continuously bother him. Surely it is much more comfortable to have the tooth-brushing habit formed than to have to be asked by one's mother when a college student home on vacation, "If you have brushed your teeth, dear," and to have to give the negative answer.

But to go back to our kicking, screaming child which is perhaps a rather crude and simple type of behavior problem. That child reacted to a situation of which he thought he was not going to approve in the manner which had proved successful heretofore in other unpopular situations. There was a motive back of his behavior, namely, to get rid of something he did not want, and it was perfectly reasonable that he should try this same method again. It was a new and salutary experience to find that as a method it did not always work. If you don't like a thing scream and kick and you may get rid of it, but the habit of nonadaptability is being formed, and life with its trials and perplexities is not successfully met by the nonadaptable one who turns

and runs away or rebels and kicks against the inevitable. If one goes on screaming and kicking through life, or adopting some equally unfortunate method the time is sure to come when it causes trouble. Without doubt many of these undesirable methods practiced successfully by little children form habits of action which are a-social and which we are justified in fearing may lead to delinquency, dependency, and even crime in later life. For instance, there is the child whose tendency to jealousy is fostered rather than eradicated by his environment. There is the imaginative and sensitive child whose fears are cultivated rather than inhibited by those dangerous adults who are without wisdom, or whose sensitiveness is so worked upon by unfortunate competition with another child that the feeling of inferiority is abnormally developed. There is the child whose natural interest in sex is so unfortunately treated as to become abnormal. Are not all these children developing traits which bid fair to become hindrances rather than helps to them when as adults they should be prepared to meet the adjustments which life calls for with the poise which is essential to well-being? Granted that this is so, what is our responsibility as child hygiene workers?

Normal growth of an association is like the growth of a living organism. It is from within out. No child grows taller by having a few added inches placed on top of its head, and no association grows normally by having new activities placed upon it by some outside agent. So it has been with the development of habit clinics in Boston. The Baby Hygiene Association grew from an association caring for infants under a year of age to an association caring for children up to school age because the workers themselves called for it as a crying need. The Habit Clinics were started last fall because the workers, faced with the problem day after day of getting satisfactory results with the preschool children, realized that there were situations in many homes with which they were not fitted to cope. Children would not eat, children had fears of one sort or another that were not overcome. Children wandered away from home and would give no account of themselves on their return. Children dominated the home in a way which was unfortunate for them and most unpleasant for the home. In fact children did those things which they ought not to do, and left undone those things which they ought to do, and there was no health in us. We were not prepared to give those mothers and children the help they needed, and we sought to remedy the defect.

Dr. Thom of the Boston Psychopathic Hospital came to one of our pre-school clinics and looked the ground over to see what might be done. As he says he had doubts and misgivings, for the difficulties loomed large to us. Language difficulties, overworked and noncomprehending mothers, distressing home environment, all seemed to make a situation difficult to deal with. But in spite of difficulties the habit clinic was begun in a very simple way, a desk and chairs, a doctor and patient and we were started. Nothing has justified our faith in it so much as the response from the mothers. They are learning that the methods they used were unwise and even deplorable, and that other methods may be adopted which bring the results which they want. They come back gladly for further advice.

To quote from Dr. Thom in regard to one case, "It was a case of two youngsters in the same family, one just over five, the other over six years of age. The younger, Gertrude, was brought to the clinic on account of persistent bed-wetting and walking in her sleep. She would wake up frightened and cry out, disturbing the entire household. The older, Helen, also a persistent bed-wetter, for the past three weeks had been vomiting every morning and occasionally during the day, and was very untidy in her dress and general habits. Both children were a great problem to the mother. She stated that it seemed as if she did nothing but wash sheets all day long, and since Helen had begun vomiting her daily routine had become even more difficult. The conditions in the home were described by a psychiatric social worker as follows: The family lived in three miserable rooms with low ceilings, small windows, and floors in a bad condition, showing that apparently no attempt had been made to do any cleaning for several days. Piles of soiled clothing were lying around, and wood and coal were scattered about the stove. In one of the rooms there was a small open toilet for the children to which they went frequently and which the woman emptied at infrequent intervals. A towel and wash cloth, that hung by the sink and that were used to wash the baby's face, were indescribably dirty. The air in the room was very bad.

"The mother, a woman of no particular intelligence who was able to speak only rather broken English, was five months pregnant. She stated that she often wondered what she had to live for. She seems to be afraid of her children, but on the other hand, was very fearful that some harm might come to them. She walked to school with them twice every day because she was afraid that the bigger children would knock

them down. There were four children, the two of whom I have been speaking, Helen and Gertrude, being the oldest. It was not difficult to determine that Helen's vomiting was purely a matter of imitation. The mother had been vomiting herself (because of her pregnancy) for the past months, often in the presence of the child. The bed-wetting of both children had been tolerated and no attempt had been made to establish a routine that would tend to break up this habit.

"Within two weeks the vomiting and the bed-wetting of both children were stopped by very simple, common sense measures. I need not say that the mother was much gratified at getting results by following our simple instructions. An effort is now being made to help her with the family budget — as the income of the father is sufficient to provide much more comfort than the family are getting — and to teach her some of the principles of cleanliness and household efficiency. In this case our success with the children was the initial wedge in getting into the household and doing something for the entire family." A discouraging home condition, and yet results were obtained.

Another child came to the clinic because she would not eat. Candy and meat or nothing was the child's ultimatum and what she said apparently carried weight. A tiny little child had learned her power and a habit was being formed which one would think might at least lead to a gastric tragedy. The child also sucked her thumb almost continuously. The mother was advised to ignore the thumb sucking and various methods were tried to encourage the child to eat properly. A child's love of approbation was played upon, simple rewards were given. The child was given a chart to fill in with crosses when she ate certain foods. Pleasure in her own gain stimulated her to further effort and eventually a better regime of nourishment was an accomplished fact. The thumb sucking which was apparently due to a feeling of hunger because of improper feeding gradually stopped. It is not all plain sailing, there are cross currents which hamper progress. In this case it was discovered that the mother lied to the child about her food, saying one day, that there was ice cream in the rice and then the child tried to drop back to her old habits and much had to be done over again.

There is the case of another child 5½ years, where the problem is stated as "Refuses food, fainting spells, thumb sucking, screams and kicks when not allowed to have her own way." She is described on the record as "very affectionate but self centered; plays well with other children; gets on well with baby sister but is ignored by older sister;

is not sullen. Mother claims that she completely dominates herself and her husband. When punished by either parent has what mother calls a fainting spell. She is then picked up and put in bed and petted until she recovers." Such a situation in a home makes a well-balanced life impossible. Things are out of gear and the tendency is to get more so rather than less. One child is getting overmuch and unwise attention to the detriment of the other children in the family. In the family mentioned the strain was particularly apparent and more or less family strife was resulting. Attendance at the habit clinic, frequent conferences with the mother and then with the child resulted in a changed attitude on the part of both and a distinct improvement in the situation.

There was the case of a child of  $3\frac{1}{2}$  years who went to bed at 7.30 and slept until 1 or 2, then woke up and woke frequently the rest of the night. She often wet the bed and her clothes during the day. The mother said she did this only when nervous. She had recently seen soldiers drilling and since then talked constantly about them and said they were going to take her. She became frightened of the dark and wanted her mother with her all the time. The child was very shy with the doctor at first and made no response to his attempt to become friends. The first efforts were made with the mother. Suggestions were made as to how to help the child overcome her fear of soldiers and a few simple changes made in the child's daily regime. Improvement was slow, but the fears were conquered, and the child's extreme shyness was overcome.

Some one may say that many of these undesirable habits are self-eliminating. This may be true to a certain extent, but they are all leaving their mark, and we are not justified in ignoring them just because some of them apparently may disappear. Someone else may say that they have tried some of the same methods described and had results without a habit clinic. So far so good. But it must be more universally done, and many, many of us need further training in child psychology in order that we may meet with helpful understanding the problems which children's actions and reactions present.

The work of the habit clinic is in its infancy. It is in no way spectacular. The doctor gets an account of the child, its physical history, and habit history from the home visitor and then has individual interviews with the mother and child. The mission of the clinic is at least twofold; it is seeking to give help to these individual cases which come to us, it is also seeking to interpret the reactions of early childhood, to

understand the intricate and involved problems of this age period and to develop means and methods of dealing with these problems which will mean a contribution to the cause of child welfare.

Apologies either before or after should not be a part of one's paper, but at least a confession at this time is almost called for. I am not a psychiatrist, a psychologist, or a psychiatric social worker. I am merely one of those workers who has long felt the need of help along these lines if we would have a well-rounded child hygiene program, and I speak because I see that help may come to all of us; not only to those who may turn to some psychiatric clinic close at hand, but to those who are working almost alone with the whole burden of the child's welfare on their shoulders. In the laboratories, which the crowded cities, equipped with hospital and medical facilities offer, methods will be worked out which eventually can so enrich our training that we may be prepared to meet those problems arising from a little child's mind.

As child hygiene workers we have in our hands a wealth of plastic material which is ours to help in the shaping. Shall it be an unbalanced and distorted thing, or can we make it "a thing of beauty and a joy forever?"

#### DISCUSSION

Dr. Esther L. Richards, Associate Professor of Psychiatry, Johns Hopkins University, Baltimore: I am glad that a child hygiene worker instead of a psychiatrist has presented to you a point of view which we members of that profession often find so difficult to put across. The Habit Clinic of Boston is one of the most welcome signs of progress in child study that is occurring in this country today. In no period of medical and social history except our own has so much been put on the start in life which a human being gets. As nurses, and social workers, and teachers, and physicians, and wide awake laymen, we are agitating the questions of prenatal influence, clean birth, better infant feeding, the hygiene of sleep and growth, and play. But there is another aspect of this start in life which is as vitally connected with the child's future as the development of a normal body, and that is the right start in healthy habits of adaptation to his environment and its inhabitants. For after all a child is something more than a bundle of physiological systems of respiration, musculature, circulation, digestion, and so forth, existing under the limited monarchy of a central and peripheral nervous mechanism. He is an individual with longings and fears and disappointments, and love, and hatred, and anger, and sorrow, and jealousy, and many other tentacles of the personality which we grown-ups use in reacting to life's experiences. It is between the ages of two and five that we begin to express this psycho-biological, equipment in action and drift into ways of using or misusing it that form lifelong patterns of behavior. Several months ago I was having tea



one afternoon in the home of an only child of seven years, whose uncertain activities in, upon, and under our chairs made connected conversation impossible. The mother told me that little Mary was a very nervous child, having inherited a delicate and highstrung temperament from her. The mere suggestion of anything contrary to Mary's wishes precipitated tears and screaming, and attacks of shaking that were terrible to witness. The family physician advised that the child should be kept very quiet and as free as possible from the strain of any formal routine until puberty, when in all probability she would outgrow this distressing behavior. With all due respect to these points of view one felt that here was a child who was learning to dominate her environment by characteristics that made a very poor adaptive equipment to meet life's problems. If at seven years the spirit of compromise and consideration for the feelings of others is scarcely in rudimentary form, can one expect their sudden acquisition at fifteen or twenty years? It is with the guidance of just such children as Mary that the Habit Clinic concerns itself.

I want particularly to call your attention to the simple setting of this Boston experiment. It does not call for elaborate apparatus imported from Germany, nor the magic touch of Coue, or any other laying on of hands. Its therapy consists of simple contacts of child, and physician, and parents, and social worker, all of whom are working not with theories of child behavior but with individual children.

## A BRIEF HISTORY OF THE NURSERY SCHOOL \*

KATHLEEN EDWARDS, Superintendent of Nursery Demonstration, Summer Session School, Columbia University

There are many institutions which have cared for the physical welfare of the child under five, but it is only within the past few years that education for the child between two and four has been considered. By education I do not mean instruction, but an environment and skilled supervision which will lead to the full growth of the child physically, mentally, and socially. The work in the free kindergartens in England first led a few to think of this education. The workers discovered that their children of four and just under had a great many habits already formed and many were bad — bad physical habits, bad social habits,— bad mental habits. They began to feel that the age for admission into their schools must be pushed back. Then the great war broke out and the nation was faced with numbers of children to care for. We discovered that our school children were often of low physique, that the physique of our soldiers was often far from good and we began to investigate. In the meanwhile Miss Rachel and Miss Margaret McMillan in London started their "Baby Camp" taking in children from one to seven. They not only paid great attention to the child's physical welfare but to his general education.

Up in the north in Manchester, Miss Grace Owen opened her nursery school training department in the Mather Training College and in 1918 Mr. Fisher's Bill provided for nursery schools. Where the local education authorities saw fit they might build nursery schools under the approval of the Board of Education who would pay 50 per cent of annual expenses. Free kindergartens begun as private enterprises, now in many cases, became nursery schools and also received a 50 per cent grant.

The war has however impoverished us and we are stationary for two years for no more new nursery schools or classes may be opened

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\* Illustrated with slides.

for that time. However, what exists is continuing and private enterprise is growing. There are twenty-three nursery schools under the State, four training colleges, and many nursery classes within elementary schools. There are also many private schools.

### THE NURSERY SCHOOL IN AMERICA

About three years ago Miss Harriet Johnson of New York started a nursery school at the City and Country School. It was started as an educational and scientific problem. There are only a few children and these are studied and their reactions recorded very minutely and scientifically. Such nursery schools as this are going to help the rest of us very much. This experiment was begun quite independently of England.

Last January the directors of the Merrill-Palmer School, Detroit, invited Miss Grace Owen's first nursery school graduate, Miss Henton by name, to start a nursery school within the Merrill-Palmer School. Here valuable records of the child's diet and nutrition are being kept. In Boston last January Miss Abigail Eliot, an American who had studied the nursery school in England, opened a nursery school in Ruggles Street. Last May I started an experiment at the Manhattanville Day Nursery, New York, and this nursery school was used as a demonstration school for Miss Owens when she came to lecture during the summer session at Columbia. Two kindergartners of Columbia, who took Miss Owen's summer course, are now conducting a nursery school experiment at Greenwich House Settlement, New York.

### THE AIM OF THE NURSERY SCHOOL

The aim of the nursery school is to take little children between two and five years of age and to place them in an environment exactly suited to their stage of development, and under the supervision of trained workers to give them opportunity for full growth.

In the ideal open-air schools, or in the airy, bright and sunny rooms of the building adapted to meet the needs of the nursery school, the children will play freely, learn good habits and develop in an atmosphere of quiet trusting joy and love. We would always consider a garden or roof garden one of the essential features of the school. Nature exerts an influence over the child which may help him to find God although unconsciously.

Music also plays an important part in the daily life.

### THE DAILY ROUTINE

The child comes at 9 A. M., takes off his out-door clothes, puts on his apron, brushes his teeth and goes to the playroom.

At 10 A. M. the children may be gathered together for a little greeting song and hymn or they may continue to play.

There are no fixed points beyond meal times and the rest periods. The children themselves lead the way.

At noon they will have their dinner, then brush their teeth, go to the toilet and then to bed. They will be in bed by 1 P. M. and most of them sleep for two hours and some even longer.

Rising, putting on shoes, and putting away the light, low wooden beds takes time and there is just a little free play before the children go home.

### BUILDING AND EQUIPMENT

The ideal nursery school is of the open-air type with sides that may be opened right out or shut according to the direction of the wind. Around this is a garden where the children may run at will.

There should be two large airy rooms for play, dinner, and rest. The children rest in the room in which they have not had dinner. In addition to the playroom there should be a well-equipped bathroom, a toilet, an isolation room, and a staff room.

*The bathroom* should have places where each child may have his own toothbrush, washcloth, comb, and towel, and these should not come in contact with those of another child. There should be low toilet bowls with faucets and liquid soap holders. There should also be a high bath. The toilets should be screened by a low door. They should be small and suited to the size of the children.

*The playroom* should have blackboards on the walls, simple but beautiful pictures hung low, low bookshelves and cupboards where the children may find toys, Montessori apparatus, and kindergarten materials. There should be a piano in the room. Growing plants should be within easy reach of the children.

### STAFF

There should always be two people with the children in a nursery school for these little babies cannot be left alone.

There should be a cook, a good dietitian and adequate domestic service besides the superintendent and her assistant.

In England the Superintendent is required not only to have had nursery school training but previous training and teaching experience. During her nursery school training of two years or in some cases one year, she has academic training, practice in nursery schools, lectures with visits and some practical work on sociology, child hygiene, child psychology, and hospital clinics. She is also required to train three months in a hospital where she has daily practice and observation in the clinic as well as work in the wards.

She is watchful of the children, ready to help them on to a higher plane if necessary, alert and cheerful but she never interferes with the free play and expression except in cases where the child is aimless or destructive.

In the bathroom and at meal times she gives direct training however.

#### THE NURSERY SCHOOL IN A DAY NURSERY

In the day nurseries the "toddlers" from eighteen months to four years old have had excellent physical care from the nurses. The nurses are trained in hospitals with sick children. They are quick and efficient, but they do everything *for* the children, whereas the nursery school teacher trains the children to do as much as possible for themselves.

The nurse does not know how to direct play along educational lines, and although she is often very kind, the children are generally quarrelsome and aimless. Here is the need for the nursery school teacher. The teacher, however, cannot work for ten or twelve hours a day—the mental strain is too great. She must also have a higher salary than a nursemaid, and a vacation, however short, once in three months. The problem is a big one but it can be solved. Manhattanville Day Nursery and Greenwich House Settlement are trying to solve it.

#### THE MANHATTANVILLE DAY NURSERY EXPERIMENT

At the Manhattanville Day Nursery there was not enough cupboard space for the children to put away their own toys and materials. There were also slat beds against the walls instead of blackboards and there was no garden. We had to make adaptations. Instead of closets we had large, wide bookshelves, low enough for the children to reach. These

were put on castors so that they might easily be moved for cleaning purposes. In this way the children were able to choose their own toys and materials and to put them away when they had finished. Such a plan made strictly individual work quite possible. We bought blackboards that could be hung and hung them on the beds, taking them down again when necessary. An awning, as a protection from sun and rain, a baby slide, a sandbox, an old trestle table, balanced against a bench as a spring board, with large flower boxes for the children's own gardening, turned one roof into a play garden. These are some of the adaptations we made, and we feel that it is possible to make similar adaptations in the nurseries.

### CO-OPERATION WITH PUBLIC HEALTH BODIES

The nursery school teacher seeks the cooperation of the neighborhood Health Services and Baby Hygiene Centers. She can detect disease as a rule, but she cannot and does not pretend to treat it. She will try to prevent it.

She needs the services of a doctor and often a nurse, and in being linked up with the local services there may be much mutual help and the prevention of overlapping.

### CO-OPERATION WITH THE HOME

The nursery school does not seek to replace the mother but to help her. The mothers are invited to watch the children at school and the Superintendent frequently visits the homes. In this way the parent and teacher "compare notes" to the mutual benefit of each. They both learn to know the child better and to work together. The Superintendent has meetings for the mothers once a month, once in two weeks or perhaps once a week.

At these meetings discussions take place and help is given. The mothers of the children are drawn together.

We believe that the nursery school is a right help to the mother at work, to the mother at home, to the poor mother and to the wealthy mother. We believe that it tends to strengthen family and community life, and we hope it may draw school life as a whole closer to family life. The nursery school may be the means of a better social order and an understanding between man and man.

## DANGERS TO BE AVOIDED

In order to keep to the aims of the nursery school it is necessary that the number of children should be small. The teacher must have a reasonable salary, a vacation every three months and a working day of not more than seven and one-half hours. This is going to be a big problem in the day nursery and there is danger of starting nursery schools in too much of a hurry. Yet while we have day nurseries and "toddlers" we should have nursery school methods. This is the problem we now have to face.

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## DISCUSSION

**Mrs. Laurence Hamill, Cleveland Day Nursery Association and Free Kindergarten:** Miss Edwards has presented such an alluring picture of a nursery school that I am sure all of us, who are struggling with the difficult group of children under school age, will feel that we cannot rest until we also have provided nursery schools for these hitherto neglected children.

I feel very strongly, however, that it would be serious to overlook the fact that a nursery school needs a teacher just as highly trained in her special line as those we provide for older children.

When we realized that the pre-school child was not having adequate medical care, it never occurred to us to suggest that the care could be provided by a less skillful physician than one who would have charge of older children, but do we quite fully understand that a nursery school is an educational movement and must be conducted as such if it is to be of any value.

I hope before another meeting of the American Child Hygiene Association several cities will have opened nursery schools, but I also hope that none will be attempted until it is possible to have an adequately trained staff and proper equipment.

When we can look to England for examples as to what may be done in this line, is it necessary that we should make the mistakes of the beginner? May we not profit by their experience and look to them for the personnel to launch our movement, and although we may move slowly, make a very wise and impressive beginning in this new line of work.

Miss Abigail A. Eliot, Director, Ruggles Street Nursery School, Boston: I should like to explain to begin with that I am the director of a nursery school in Boston, the Ruggles Street Nursery School. This school was started January 1, 1922, and is under the auspices of the Women's Education Association of Boston, having been undertaken by them as an educational experiment. We admit any children two and three years of age. Age is the only condition of admission except for physical examination and the payment of a fee charged to cover the cost of the food. The school is located in a poor district. Some of the children's mothers work out of the home but the majority do not.

I want especially to emphasize the value of a nursery school as a demonstration to the mothers of right physical, mental, and moral care of their children. Our mothers are encouraged to visit frequently to see what is going on in the school. They do visit and become deeply impressed by what they see the children doing, whether it is eating vegetables, sleeping soundly in the middle of the day, washing their own face and hands, or modeling with plasticine. Most parents become prouder of their children and more eager to do their best for them after they have been in the school a while. Several of the mothers have spent time regularly each week for a period of weeks at the school helping with the care of the children. We have mothers' meetings, when we combine pleasure with profitable discussion of some phase of child care. From our experience I feel very sure that a nursery school offers great possibilities for the education of mothers.

Miss Edwards has asked me to speak of our connection with the public health agency. We are fortunate in having the firm friendship and invaluable help of the Baby Hygiene Association of Boston. All the children in the school are examined, on admission, in the local clinic of the Association and become enrolled as its charges as well as our own. Also one of the staff nurses of the Association comes to the school every morning to inspect the children for symptoms of contagious disease and to help in the teaching of health habits. Thus we are assured of proper health supervision for our children.

Harriet L. Leete, R. N., Director of Field Work, American Child Hygiene Association: I have an announcement to make which is of interest to nurses. All of you know the *Mother and Child* Magazine and all of you know Miss Babbitt, but I doubt if any of you know how many hours she spends searching for helpful information for you. Her latest contribution to the nursing group is in memory of Edith Cavell, a picture of whom forms the frontispiece of the October issue of *Mother and Child*. As a compliment to the nurses Miss Babbitt had a hundred copies made and you may obtain one from her, or may write later after your return.





## **MATERNAL WELFARE**

**PRENTISS WILLSON, M. D., Washington, D. C., Presiding**



## THE SERVICE OF AN OBSTETRICAL CLINIC TO THE COMMUNITY

ARTHUR H. MORSE, M. D., Department of Obstetrics and Gynecology, School of Medicine, Yale University

In considering the service of an obstetrical clinic to the community, my viewpoint is that of a university teacher whose activities lie in both hospital and medical school, and who therefore comes in contact with dispensary, ward, and private patients, and is in constant touch with junior assistants, medical students, nurses, and general practitioners. Since the degree of service which the clinic can contribute depends so largely upon its physical plant and organized personnel, these will be emphasized first. The various avenues through which the service of the clinic can be directed will then be shown. Finally, as important requisites for improving conditions pertaining to the welfare of women and infants, I shall advocate extending the province of the obstetrical clinic to include the study and treatment of all diseases of the female generative organs and further, educating the public regarding proper attention during pregnancy and labor.

To be most effective, the various activities of the clinic should form by themselves a departmental unit of a general hospital. This department should possess a sufficient number of beds, both free and semi-private, delivery and operating rooms properly equipped, a prenatal clinic, an out-patient service for the care of women who are to be delivered at their homes, and a postpartum clinic for the supervision of women following delivery. Moreover, there should be laboratories equipped for the conduct of investigative work. Finally, there must be an adequate staff of trained assistants and nurses.

The senior staff should consist of a chief of service and his associates, whose principal duties are the care of patients, the teaching of students and the direction of investigative work. The house staff should be composed of a resident, assistant residents, and internes. Personal experience has taught me that the pursuit of an active private practice precludes the proper conduct of a modern clinic. Therefore, while the strict academic plan may not prove to be ideal, I am convinced that a clinic exerts its widest influence if the director and his associates con-

fine their work to one hospital. A graded house staff consisting of residents and internes is of notable advantage to surgeons and to patients. Men who have advanced through preliminary training to the residency are in a position to share the responsibilities and strains of clinical work and are qualified to care for sudden obstetrical emergencies. In addition, the resident staff is a valuable adjunct to the teaching force of the clinic.

The first duty of the clinic is the care of patients. The number of hospital beds assigned for this purpose varies according to the community, but for the type of staff which I have in mind this should not exceed one hundred. Of this number a certain proportion should be reserved as a prenatal ward for the observation and treatment of abnormal cases of pregnancy. Furthermore, it should be emphasized that the possession of prenatal beds makes available facilities which are indispensable for the proper instruction of students and nurses.

From this brief outline of the organization and administration of a clinic, I turn to a consideration of the avenues through which it can contribute to the welfare of the community. Patients should be encouraged to register in the prenatal clinic in the early months of pregnancy. At the first visit a thorough general physical examination should be made during which particular attention should be directed toward the discovery of pulmonary or cardiac lesions. Blood should be taken for a Wasserman reaction, the urine should be studied, and the blood pressure should be determined. Finally, the pelvis should be accurately measured.

In encouraging attendance on the out-patient clinic, no factor is of greater advantage than consultations by appointment. We have recently adopted this system and it has proved so satisfactory that I shall speak of it in detail. The dispensary clientele is no longer requested to be present at the opening hour of the clinic, but each woman is assigned a definite appointment for each consultation. In this way, the irregularity of attendance so familiar to all of us is avoided and an even distribution of patients is obtained. As a result no time is wasted as under the old system. This is an important item to women who are employed and to mothers who are burdened with household duties and the care of large families. Under this system, the energy of the clinician is better utilized and he is enabled to give more concentrated study to the individual patient. Interesting cases are more carefully followed and, if desirable, grouped for instruction. Moreover, the stu-

dent's interest is aroused and the quality of his work is improved. We are gratified also to find that the appointment system conserves the time of social workers and nurses connected with welfare organizations, for formerly they were obliged to wait when they accompanied patients to the dispensary for consultation. Under the new system, these workers can arrange for appointments and their patients will be seen at the periods allotted to them. Those who are associated in the conduct of a woman's clinic should know that even a dispensary patient possesses a certain delicacy of feeling and they should realize that privacy influences a woman's psychological reaction. The least offence is given and the best results are obtained when the woman visiting the dispensary is afforded that consideration which would be given her by a private physician. The adoption of the appointment system is a step toward this ideal. In order to give equal opportunities to middle class patients, who can not afford the expense of numerous consultations but do not wish to be objects of charity, it appears that similar pay clinics would offer a much needed service to the community.

The outside service is concerned principally with the delivery at home of multiparous women who present no abnormalities. Primiparous women should not be attended by this service for the obvious reason that the character of labor in these patients is uncertain. Nor should the entire responsibility for out-patient deliveries be entrusted to undergraduates alone, but a student should be accompanied by a member of the staff and a nurse. As a means of instruction the value of an out-patient service is debatable, for it appears as little justifiable to teach abdominal surgery in a poorly equipped home as to teach obstetrical technic and operative procedures under similar circumstances. Therefore, I am in accord with those who favor the abolition of out-patient services and the restriction of the teaching and practice of the obstetrical clinic to the hospital.

If the service of the clinic is constantly to improve, the staff must review all details in each case on discharge. Nor does the duty of the clinic end here. Upon leaving the wards, the patient should be directed to return upon a stated date to the postpartum clinic. Such a routine study of patients following delivery frequently reveals injuries to the pelvic floor or pelvic abnormalities which demand operative treatment if the woman is to be returned to sound health. On the other hand, future surgical interference may be obviated as when, for example, a puerperal retroflexion of the uterus is permanently corrected by the

insertion of a pessary. Moreover, prolonged observation is particularly indicated in those patients whose pregnancies have been complicated by a toxæmia or by a cardiac lesion, for the information derived in this way is invaluable in the event of a subsequent pregnancy.

Now the efficiency of the ante and postpartum clinics and of the outside obstetrical service, if that be still maintained, depends largely upon the possession of an adequate personnel of well trained obstetrical nurses and social workers. It is their duty to see that patients are given their appointments and that they return at proper intervals for subsequent examinations. They instruct prospective mothers regarding such matters as a proper diet, the advisability of refraining from excessive work during the latter part of pregnancy and the significance of antepartum hemorrhage. If there are evidences of a toxæmia, they direct the patient to the dispensary or hospital for examination or treatment. Then, too, the decision to deliver a patient outside the hospital frequently depends upon the results of their investigation of the home surroundings. No one familiar with the work of a modern clinic will undervalue the services which this division of its personnel contributes to the community.

Another type of service depends upon the fulfillment of the responsibility of the clinic as a teaching center. Its resident staff is composed of young men who will later become practising specialists or perhaps teachers and directors of similar departments in medical schools or hospitals. These men should be allowed every opportunity for familiarizing themselves with the methods of prenatal care, the conduct of labor and the puerperium, the pre and postoperative care of patients and ward administration. Moreover, they should be taught the various surgical procedures employed in the treatment of obstetrical and gynecological patients and should be given experience in the instruction of students.

No one familiar with the general low standard of obstetric practice will underestimate the importance of student instruction. Students of to-day become the practitioners of the future and through them the ideals of the clinic are carried directly to the community. Therefore, adequate undergraduate training is essential if the standard is to be raised. All students should be taught the fundamentals of obstetrics; in addition elective courses should be offered to those who wish to do more advanced work. Such an elective plan makes possible intensive teaching to smaller groups of selected fourth-year men. Moreover, men so trained will be

of greater value to the community as general practitioners, while they will possess a foundation upon which to build if they choose to engage in postgraduate studies.

One of the greatest obstacles to the successful conduct of an obstetrical clinic is the difficulty encountered in obtaining well-trained obstetrical nurses. Few women choose this branch of the profession as their life work and many state frankly that they dislike obstetrics. However, in many instances the aversion which is felt toward this field of medicine depends upon inadequate knowledge concerning it. Pupil nurses are impressed with the drudgery of obstetrics; their deep interest in the subject as one of the most important divisions of surgery is seldom aroused. Furthermore, the usual undergraduate training is insufficient to impart that degree of information which conduces to equanimity during the progress of a difficult labor.

Now the nurse bears a heavy burden of responsibility and in order to have peace of mind while caring for an obstetrical case, she must possess an adequate amount of scientific knowledge. In addition to her experience of general surgical nursing, she should know the anatomy and physiology of the female generative organs and should be informed concerning the physiological changes which occur during pregnancy. She should be familiar with the symptoms and signs which indicate the presence of abnormalities in the prenatal period. She should understand the mechanism of labor and should be acquainted with the physiological and pathological changes of the puerperium. Well-trained obstetrical nurses not only are essential for the proper conduct of a modern clinic, but they compose an important division of the personnel of social and welfare organizations. In this connection state health departments find it difficult to secure nurses adequately trained in this branch of the profession to act as supervisors in the field. Consequently, the clinic should be glad to cooperate in the education of the nurse and should offer her opportunities for advanced postgraduate instruction.

Since the majority of obstetrical patients first consult the general practitioner, he frequently encounters major obstetrical complications which need the resources of the clinic for their proper solution. In these matters, the attitude of the staff should be sympathetic and friendly. The local physician should be encouraged to confer with them concerning difficult questions of diagnosis and to send to the hospital complicated cases of pregnancy and labor which require the facilities of a well



equipped clinic for their successful treatment. In brief, the too frequently prevalent spirit of antagonism should be obliterated and hospital and local physician should cooperate for the welfare of the community.

Cooperation between the clinic and welfare associations offers another means by which valuable service may be rendered. These organizations come in close contact with women of limited education and means, and they possess conspicuous opportunities for raising the standard of obstetric practice by emphasizing the importance of adequate prenatal care and of skilled attention during delivery. Moreover, their visiting nurses can influence many women to visit the dispensary for examination or treatment. Finally, duplication of work and equipment would be avoided and a notable step in advance would be made if established clinics were to act in the rôle of consultant for the prenatal centers which are being developed throughout the country.

The staff of a modern hospital should further contribute to the welfare of the community through investigative work in obstetrics and gynecology. In addition, therefore, to the facilities which I have mentioned, the obstetrical clinic should possess laboratories equipped for the study of anatomical, physiological, pathological, and chemical problems.

Having indicated the type of service which an obstetrical clinic can render, I wish to point out the greater value to the community of a departmental unit which deals not only with obstetrics but which includes within its province the study and treatment of the pathology of the entire female reproductive tract. From experience in general surgery and obstetrics, I believe that no complications occur which demand greater judgment and skill than do those which are met by the obstetrical surgeon. For example, he must treat such conditions as a ruptured uterus, or a perforation of the uterus associated with laceration of the intestine; he must be capable of delivering successfully a patient who presents an adherent incarcerated uterus at term. In any one of these circumstances the life of the patient is further jeopardized unless the operator is proficient in the technical procedures employed in pelvic and abdominal surgery. But since the percentage of abdominal operations in a clinic limited to the care of obstetrical cases is relatively small, this necessary technical skill can be gained only in a department which combines the study and treatment of obstetrical and gynecological

cases. Moreover, such an organization provides distinct advantages for investigative work, teaching, and clinical instruction. It attracts to its personnel assistants of a higher grade than if its work were restricted merely to the care of women in labor. It benefits the community by developing men of broad knowledge and experience who are qualified to deal not only with the less intricate problems of pregnancy and labor but also with the major obstetrical and gynecological complications.

Greater efforts must be made toward the education of the laity regarding the necessity of adequate supervision throughout pregnancy and of skilled attention at the time of delivery. They must be brought to realize that, excepting gonorrheal infection and tumors, practically all diseases of the female reproductive tract are intimately related to childbirth and are largely preventable. They must be taught that for primiparous women and for all those presenting abnormalities, a well equipped hospital is the safest place for delivery. Finally, they must learn that the successful management of the major obstetrical complications depends upon the surgeon's possession of the highest type of judgment and skill.

To recapitulate: Such a clinic should be a divisional unit of a general hospital and should be conducted by a senior staff whose time and energies are wholly devoted to the activities of the department and by a junior house staff composed of a resident, assistant residents, and internes.

Contributions should be made to the community by cooperating with general practitioners and welfare organizations in the care of patients, by training future teachers and specialists, by teaching students and nurses and by investigating problems relating to pregnancy and the diseases of women. In order that poor women and those of the middle class may avail themselves of the facilities of the clinic, it must possess free and semiprivate beds.

The greatest service will be rendered to the community by a clinic which cares not only for normal and complicated obstetrical cases, but which includes within its province the study and treatment of all pathological conditions of the female generative system.

Finally, that the service of the clinic may be extended to the greatest number of women of the community, the laity must be so educated along the lines I have indicated that they will be eager to seek the advantages which are available to them.

## DISCUSSION

**Dr. Richard Smith, Boston:** It seems to me we ought to discuss this matter because of the very great importance which it has in any child health program. I think we have been slow to put into effect many of the things which we believe are desirable in this connection. We have recognized for some time that from the point of view of saving life, the most important single age group with which we have to do in the whole period of childhood is the age which comes first—the first month of life—and we realize that the whole solution of the problems of that period is to a considerable extent in the hands of the obstetrician. We know that the high infant mortality rate of this first month is dependent upon conditions which are operative before and at the time of birth. We must concern ourselves more than we have in the past, in working into the general child health program, a complete and adequate obstetrical service. The outline which Dr. Morse has presented is particularly stimulating in its completeness and in the adequacy of the service which will be rendered. I hope very much that we may have some exchange of ideas and discussion with regard to the possibility of incorporating such a complete and adequate obstetrical service into the child health program.

**Miss Alice Findlay, Knoxville, Tenn.:** I spent the last seven weeks at Henry Street Settlement, the 79th Street nursing center; and that is primarily an obstetrical center. We work in connection with Manhattan Maternity Hospital indoor patient and out-patient department, and the out-patient department has charge of mothers who have given birth to more than one child. Mothers of first children are taken into the hospital, because the Manhattan people feel that there are dangers of complications, and they will not take the responsibility of a delivery in a home with a mother the first time. After that, if a mother is perfectly normal, and the Manhattan Hospital feels that conditions warrant it, the delivery is done very successfully in the home, as the doctor suggests, with a staff man in attendance, assisted by an interne and a Henry Street nurse. And we have found that the work has been very successful. The Henry Street nurses carry this mother as an antepartum case.

As soon as a prenatal case is reported to the Manhattan people, they automatically report her to Henry Street, and the Henry Street nurses go in and give instruction to this mother. This instruction has been arranged for with the Manhattan people, and they have a routine which is carried out in connection with Manhattan Hospital. The mothers are so thoroughly and well instructed beforehand that when they come to time of delivery there is very little trouble in getting the home ready. No matter how poor the mother may be everything is arranged so that there isn't a lot of trouble and the doctor isn't delayed.

And we have a very good follow-up. We very seldom have any infection. I do not know of but one case in my whole seven weeks there where we had any trouble afterwards, and that was in a home that we did not have as an antepartum case, nor as a nursing case immediately after delivery.

**Helen Chesley Peck, Minneapolis, Minn.:** I would like to say a word to those who are trying to avoid the overlapping of nurses in the prenatal field. In Man-

neapolis, when the Infant Welfare Society wanted to broaden its work to include this service, the visiting nurses were already doing some prenatal work and rather than put into the field a new group of nurses to do prenatal work, we have an affiliation with the Visiting Nurses Association by which each new nurse on the Visiting Nurse staff comes into the Infant Welfare Society for a week's intensive instruction in prenatal work. The Infant Welfare supervisor directs the prenatal work for the two societies. After the visiting nurses have been trained they attend the Infant Welfare prenatal clinics in rotation to keep in touch with the doctors, and the prenatal supervisor of the Infant Welfare Society goes regularly into the substations of the Visiting Nurse Association.

Any patient who plans for confinement at home is at once referred to the visiting nurse in that district for home follow-up.

The General Hospital prenatal service is also under the direction of the supervisor of the Infant Welfare Society, and the visiting nurses do the home follow-up for all patients who have out-patient service from the University Hospital. So by using the workers already in the field, we have one standard for prenatal work all through the city.

We have recently worked out a simple prenatal manual for the nurses and a pattern for a maternity belt, which perhaps will be of some service to workers in isolated communities.

**Dr. A. B. Chandler, Medical Director, Child Welfare Association, Montreal, Canada:** The doctor emphasized the general hospital as being almost necessary. I wish he would go into that further. In one city not far from here, last week they were deploring the fact they did not have any maternity hospital; if we would go into the advantages and the disadvantage of the two types of service, I would be glad.

As a pediatrician, I want to congratulate him on his complete paper. I was disappointed, as there was no mention of breast feeding. That is an issue we always have as obstetricians; and at a meeting of this kind, especially, I wish he would explain what is done in breast feeding both during prenatal and at the time the woman is in the hospital.

**Dr. Charles J. Hastings, Medical Officer of Health, Department of Public Health, Toronto, Canada:** I would not take the time now to discuss this subject. I will discuss it more fully later on probably; but I don't want to miss this opportunity of doing justice to myself and my country by expressing my appreciation of the very able paper to which we have listened this morning. I presume, in regard to the question just raised, the idea of Professor Morse not referring to the breast feeding is that he assumes that we have surely got past that stage now, and that it's an accepted fact that every person takes it for granted that the primary factor in connection with reducing infant mortality is increased breast feeding. I don't think that we could possibly overestimate the importance of these obstetrical clinics or prenatal clinics, from an educational standpoint. In fact that is really the object and end of all these clinics, to give us an opportunity to properly enlighten the mother as regards the precautions she should observe and

point out to her the many possible dangers she is likely to encounter if the precautions are not observed. But we realize the fact, I think, all of us, that the general practitioner should consider more seriously the sacred trust placed in his hands in these cases, and an education of the public generally to the fact that the general practitioner is required to attend a case of obstetrics for twenty-five dollars, when his colleague in surgery can perform half a dozen major operations or more in the same length of time that he is required to spend over that case of obstetrics if he is going to do justice to it, and the surgeon receives from one hundred to five hundred dollars for each operation.

As I pointed out yesterday, prenatal care affords a wonderful opportunity to emphasize to the expectant mother the importance of nursing her babe. We have lost sight of the fact that the child when born is nine months old; and if we haven't looked after it from the very moment of conception and recognized the fact that the only possible source of nutrition for that offspring is the mother's blood; thus having seen to it that the mother is kept in the best possible condition, because if she is not properly nourished, if her blood does not contain the necessary lime salts, the teeth and bones of the infant will not be properly developed. It is in the prenatal period that we can hope to do those things which are essential to insure the child being well born.

**Mr. J. Prentice Murphy, Philadelphia:** I wish to register my great appreciation of Dr. Morse's paper. There is a further aspect of this question which I should like to have him discuss. I think we have about a thousand maternity homes in the United States. Some are good; some are fair, and a great many are poor or bad. I think it is the opinion of many social workers that a great number of these maternity homes, with their large endowments and very considerable investments of capital in buildings and equipment, and handling, as they do, thousands of mothers each year, are, on the whole, outside the control of the best obstetricians and social workers in their communities. The secretary of this association would carve out a very fine job for himself, and for this association, if he would institute a movement looking to the standardization of the work of these maternity homes in accordance with the procedure laid down in Mr. Morse's paper.

Practically all the maternity home deliveries are primary deliveries, and the social possibilities for good work, growing out of good obstetrical care, are limitless. Are we not all in agreement that these maternity homes should be definitely part of the medical organization of the best medical institutions in the country?

When I say that there are approximately one thousand maternity homes in the United States, I am not taking into account the unlicensed, unincorporated, and fly-by-night kinds. One cannot even guess how many there are of these.

**Dr. E. F. Davis, Chicago Maternity Hospital:** The importance of having ideal maternity work done has many practical angles. Those who have devoted themselves to obstetrics and have the high ideals outlined in the paper, will recognize the reason why they are not carried out in a general hospital. In connection with the general hospitals last year, I made a survey of Chicago and found the maternity wards and the maternity end of those large beautiful general hospitals either in the attic or in the basement. They were where the general surgeon did not want

the space. They were given the old implements that the surgeons had discarded; they were given things that the other people did not want. Now, there's a reason for that, and I think the gentleman here from Canada gave you the reason, because general surgery is better paid, and there's nothing succeeds like success; and the man who gets a fortune out of his surgery isn't—unless he is an extremely kind-hearted individual—going to devote himself to a line of practice which is very arduous and very poorly paid.

Now, there's another point here. We must educate the public to pay a little more for the service, or else they will get poor service. What they do not pay for they do not get. And that's why these little maternity homes are established—to give to poor people at very small cost what they are often quite unable to pay for in the big hospitals.

Then there is another reason why the average nurse doesn't like obstetrics in the general hospital. The nurse sees the patient nine or ten days. In one of the largest hospitals in Chicago they average nearly a hundred cases per month; they dismiss their patients the eleventh day. That's the rule if no real complication presents itself. Now, that nurse in her service gets too little of the knowledge of the infant's care. The first ten days is experimental work with the infant. I realize that because I have a small maternity hospital which I have lived in for twenty years. It's a private institution, and we take for pupil nurses ordinary girls that are not in general training and give them a year. We started out with that ideal, and I think that's the best thing to do. The war cut into that service and shortened it, but we formerly gave them a year, and about six months of that year is spent in a nursery where we have feeding cases only. We do not take care of sick babies, but well babies under two years. Six months is given to the teaching of the nurse in handling that sort of a child. I patterned my school after the one which Dr. Holt established in New York twenty years ago. These nurses, with just ordinary education, with a year's training of intensified maternity and infant nursing work, are acceptable to the best families. Of course there are difficulties, and sometimes people have to be educated to the thought that these nurses of one year's training in this special line of work are as good or better than the ordinary R. N. nurse. They are better in this way: They understand the baby; they have a chance to understand the baby. They have been educated about the baby; and they like their work, and their work is easy, especially if the mothers had proper prenatal care. When I began my obstetrical career, I was taught to give prenatal care. In my medical teaching in the colleges, covering a period of many years, I taught my students the importance of it, also my pupil nurses. For that reason our babies are well when they are born, as a rule—not always, because you cannot always correct everything. But these babies are more quiet and peaceful; they grow better and do not keep the nurse up nights; and she likes her job, because she knows her job. And that is where, I think, the general training schools will have to pay a little more attention not to give the nurse so much of the surgical training, but a little more of the physiological care of the child and of the prenatal care. That has always been in my curriculum of teaching—prenatal care. I do not know how you will get around the economic question and make the best people go into the hardest kind of work. If we were paid

like dentists for the number of hours put in, perhaps it would be a different situation; but this is the situation, and I think it is up to a movement like this to solve that kind of a problem. But I think educating your nurses more intensively is the big job. Postgraduate work might do it, but a few weeks in a general hospital will not. In that way only will you get your nurses to like obstetrical nursing.

**Mrs. Winifred Hathaway, National Committee for the Prevention of Blindness, New York:** I am afraid I am waving a red flag at the bull when I suggest a consideration of the midwife in connection with obstetrics. The midwife is with us, whether we like it or not. One state, that thought it had no midwife problem, began to register its midwives and found 7,000 practicing—more than twice the number of physicians in the state. In some parts of our country over 80 per cent of births are still being attended by untrained midwives. Anyone who has followed in the wake of the untrained midwife finds conditions almost too dreadful to relate. It is useless to ignore the midwife; we must either train her or eliminate her.

The best way to eliminate the midwife, at least the inefficient midwife, is to require training; but we cannot demand training unless we provide proper facilities for training. There are not more than three schools in the United States that give anything like adequate training. In New York City, where training is now required, the Bellevue Training School for Midwives is doing excellent service; since its establishment the number of practicing midwives has been cut in two.

If such a program as Dr. Smith suggests is to be put into operation, the midwife problem must be thrashed out; if the midwife is to remain, she must be given adequate training, and must be licensed and registered.

**Dr. Morse (closing discussion):** In reply to Miss Findlay, I do not wish my remarks regarding the outside obstetrical service to be misinterpreted. We have at Yale an out-patient service which runs remarkably well. Nevertheless, I hold that we would conserve the time of the attendant, nurse, and student and that we would accomplish more, from the standpoint of teaching, if all our cases were cared for in the hospital.

In answer to Dr. Chandler's questions, I believe that a woman's clinic is best conducted in conjunction with a general hospital, because facilities for consultation are offered which are not presented if the clinic for women is an isolated unit. The gynecologist, for example, frequently needs the advice of the pediatrician, the psychiatrist, or the internist.

We emphasize the necessity of breast feeding. Women in our prenatal clinic are always instructed regarding the proper preparation of the nipples for nursing. Patients who do not wish to suckle their infants are frequently induced to do so by emphasizing the fact that if the child is nursed the pelvic organs will more quickly regain their normal condition.

I am sympathetic with Dr. Davis when she speaks of attics and basements. It is true that the situation of the obstetrical wards is frequently unsatisfactory. However, I am hopeful of improvements in this direction because I believe that

hospital authorities are realizing more and more the importance of obstetrics. For example, Dr. Whitridge Williams' new clinic at Johns Hopkins is without question the first and finest of its type in the country. And it ought to be emphasized that the major work of this new clinic is to be investigation and teaching.

The midwife question mentioned by Mrs. Hathaway is a difficult one. Doubtless we cannot do away with the midwife at the present moment. But I feel that in the end more will be accomplished if we direct all our forces toward training the student and developing the right type of practitioner. In this way only can the standard of obstetric practice be raised.



## MATERNAL MORTALITY

W. J. BELL, M. D., Maternal and Child Welfare Bureau, Ontario Provincial Board of Health, Toronto, Canada

The subject of maternal mortality has in the past received a great deal of attention, but in spite of the fact that much has been written on the subject and frequent discussions have taken place, as to its causes, our rates do not show the decrease we would like to see. On the other hand they show, if any change, a slight increase.

Those of you who have had occasion to investigate statistics of maternal mortality know that under the present system of registration of deaths it is extremely difficult to obtain these figures and further, that even when the figures available are obtained, a considerable error occurs owing to the fact that some physicians prefer to report a death as due to almost any cause rather than puerperal sepsis or some other actual cause of maternal mortality. At our request, the Deputy Register General of the Province of Ontario is this year instituting a questionnaire to be submitted to physicians, dealing with the death of every woman between the ages of sixteen and forty-nine, for the purpose of obtaining information as to whether pregnancy or parturition was the direct or contributory cause of the woman's death. This information is to be compiled by itself, so that at the end of the year 1922, we shall have much more accurate and detailed information regarding maternal deaths than we have hitherto been in possession of, and this information will be in a condensed and compact form admitting of a statistical analysis should such be desired.

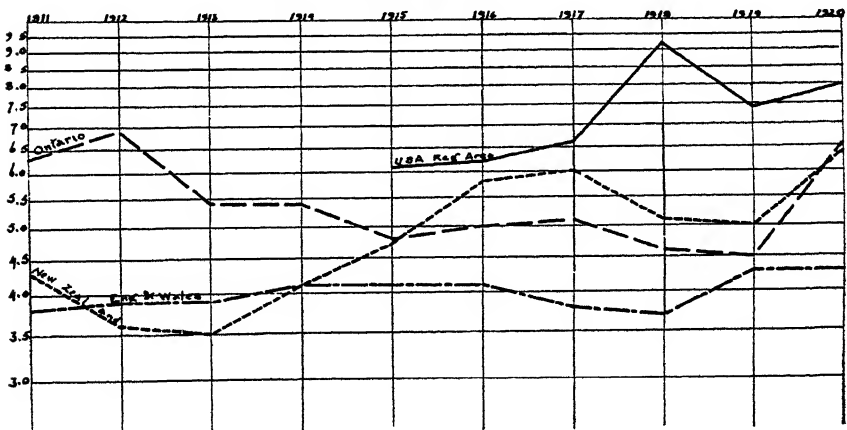
When we consider the subject of maternal mortality alone we leave out a very important and very closely allied subject, that of maternal morbidity. A considerable number of parturient women escape the mortality list but find a place in the morbidity list. A prominent gynecologist has told me that the major portion of the work of the specialist in his line was due to disability following parturition and the writer of this paper desires that any discussion of maternal mortality which may follow its reading will include, not only maternal mortality, but its near neighbor maternal morbidity. Some of the causes of the two results are identical, so that part of the discussion of one condition may embody both.

A study of the statistics which were compiled for me by the Deputy Registrar General of Ontario, while not sufficiently specific to permit of detailed analysis, shows that puerperal septicaemia is still the big factor as a cause of maternal mortality, followed closely by albuminuria. Out of 489 maternal deaths in Ontario, for the year 1920, 154 were due to puerperal septicaemia and 122 to albuminuria. The statistics for the Province of Ontario for the ten years 1911 to 1920 inclusive, show a total ratio of 6.91 maternal deaths per thousand live births, the highest occurring in 1912, to 4.52 maternal deaths per thousand live births, the lowest occurring in 1919. The rate in 1920 was up again to 6.75 per thousand. Comparing the Ontario rates for total maternal mortality, with those of England and Wales for the same period, we find that the rate in England and Wales is considerably lower, and that it varies less from year to year than does the Ontario rate. Their lowest rate occurred in 1918, when it was 3.55 per thousand live births. Their highest rate was in 1919 when the rate was 4.12 per thousand live births, which was .4 lower than the lowest Ontario rate for the ten year period.

The maternal mortality rate due to sepsis in England and Wales has exceeded the Ontario rate only once in the past ten years, namely in the year 1919, when their rate for fatal sepsis was 1.76 per thousand live births as against the Ontario rate for that year of 1.35 per thousand live births. Over the ten year period, their rate for fatal sepsis has been from five-eighths to seven-eighths of the Ontario rate for the corresponding year.

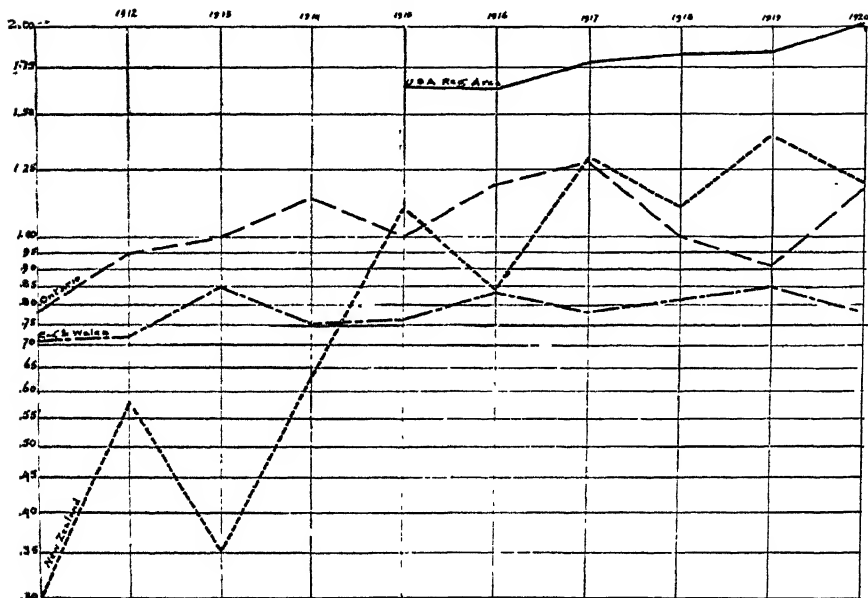
## DEATHS FROM PUERPERAL CAUSES

Ratio per 1000 living births.



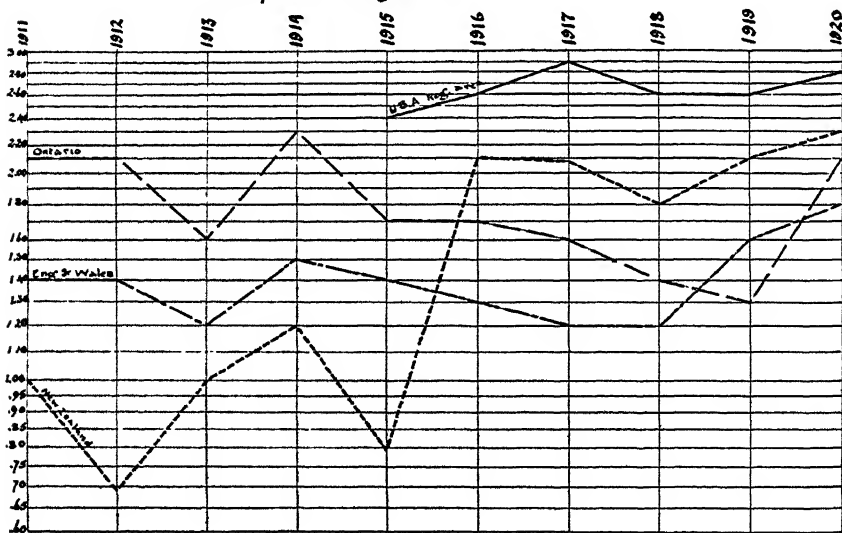
## DEATHS FROM PUERPERAL ALBUMINURIA

Ratio per 1000 living births.



## DEATHS FROM PUERPERAL SEPTICEMIA

Ratio per 1000 living births.



In Ontario, as elsewhere, albuminuria has been the factor second in importance only to sepsis as a cause of maternal mortality. The rate has shown a steady increase from 1911 to 1920, when it reached the large figure of 122, accounting for almost exactly 25 per cent of maternal deaths for that year. In the city of Toronto, on the other hand, only 14 deaths out of 104 were accounted for by albuminuria. This last statement is significant. The reason for this lower rate is given later in this paper.

A specific analysis of the causes of maternal deaths for the year 1920, could be conveniently prepared for only one municipality and one public institution in Ontario, namely the city of Toronto, and the Toronto General Hospital, the statistics for the latter being embodied in the former. In the city of Toronto during the year 1920, 104 maternal deaths from all causes occurred. Of these 50 were due to septicaemia, 14 to albuminuria, 9 to puerperal phlegmasia, 18 to hemorrhage, 2 to pernicious vomiting, 4 to ectopic gestation, 3 to parturition, accompanied with cardiac complication, 2 to rupture of the uterus, 6 to placenta praevia (included in hemorrhage), 2 to other accidents of labor. At the Toronto Hospital 9 deaths occurred from influenza in pregnant women, 1 from pulmonary tuberculosis in a pregnant woman, 1 from erysipelas in a pregnant woman, the erysipelas being the primary cause of death, 3 from eclampsia, 2 from rupture of the uterus, 1 from placenta praevia, 1 from pulmonary embolus, 1 from parturition with cardiac complication, 1 from post-partum hemorrhage, 4 from septicaemia. The more detailed analysis of the hospital cases is included in the general city registration of the 104 maternal deaths. In this paper the writer has made a detailed study of the Province of Ontario only. The accompanying charts show the comparison between the Ontario figures and those for England and Wales, New Zealand, and the Registration Area of the United States in corresponding years.

A study of the statistics I have summarized shows two points:

1. The problem of maternal mortality is a large and serious problem.
2. It is not being solved.

It would seem that the methods we have been pursuing for years past are not sufficient, that in spite of extensive research and the development of modern methods, we are not progressing and that more

intensive work yet remains to be done before our maternal death rate will be lowered. One thing seems certain — a large percentage of our mortality amongst pregnant and parturient women, namely that due to sepsis and albuminuria, is preventable. Intensive effort dealing with these two conditions would assuredly reduce the high figures that have prevailed for years past.

In attacking this problem the first matter for consideration is the personnel involved, consisting of the profession and the public, and with the profession I would include the nurse, trained and fully qualified, or practical.

To the public the function of reproduction and parturition is an old story. It is common to the whole animal kingdom. It has gone on along certain lines since time was, and from time to time assistance has been given women in labor, but the public as a whole is grossly ignorant of the dangers incident to pregnancy and parturition. Many a person will converse fairly intelligently on such subjects as small-pox, anthrax, contaminated water, and typhoid fever and yet know practically nothing of the serious conditions with which this paper attempts to deal. The attitude of the public appears to be that this physical function has been exercised for many years and that it is usually attended without mishap. It is, and has been an attitude of *laissez faire* and this must be the main point of attack in dealing with the problem as far as the public is concerned.

It is not the intention of the writer to criticize the obstetrical work of the physicians further than to state that bad obstetrical work is occasionally the result of an attempt on the part of the obstetrician to direct nature, rather than to assist her efforts in the delivery. The main body of our physicians are conscientious men who realize the responsibility they assume in undertaking a midwifery case, and who conduct a labor with every possible care. There is still and possibly always will be the careless man whose hands are unclean, whose instruments are unclean, and who is careless in his methods and his technique. The doctor of this type will soon be relegated to his proper place by the public, that is now being informed as to reasonable maternal care, and the man who aims to exercise the necessary precautions will be appreciated accordingly.

In this connection, I should like to read you a letter recently received by the Chief Health Officer of Ontario. It reads as follows:

DEAR SIR —

I came on a paragraph in *Social Welfare* recently which stated that 2,000 mothers die annually in Canada on account of child birth, of which deaths 90 per cent are preventable, and was shocked to think of such a waste in this civilized age.

This brought to mind the loss of two mothers in our township during 1921:

(1) B. K. F., 36 years of age, and mother of two children, gave birth to a stillborn infant on December 8th, 1920.

On January 3rd, 1921, she died after great suffering. The cause of death given on the doctor's certificate was:

Primary — Sepsis and phlebitis.

Contributory — Pulmonary thrombosis.

It may be argued that this woman did not have competent care during her illness, but a friend of mine who was present at the birth told me that the doctor was not careful to cleanse his hands or sterilize his instruments in the thorough manner any other doctor she had seen at work on such an occasion would do.

(2) A. M., 41 years of age, the mother of three children, was attended by the same doctor as Mrs. F. Mrs. M's death, which occurred November 24th last, was given as due to the following cause:

Primary — Abortion, caused by fall with subsequent toxæmia.

Length of Illness — 18 days.

Contributory — Pulmonary congestion.

Did an operation precede death? Yes, November 1, 1921, curettage.

I do not understand these medical terms but know that intelligent neighbors of this woman were indignant at her death, so resolved to bring the matter to your attention.

I do not know what the law would do in such cases, but know the bereaved husbands are too busy caring for their children to inquire into it.

Is there no law compelling a medical practitioner to be clean and to sterilize everything properly, and to instruct the attendants exactly what to do along these lines; or can he go blundering on until public opinion wrests his practice from him?

Sincerely yours,

M. A. F. (Township Clerk).

At an earlier point in this paper, I referred to the comparatively low maternal death rate of England and Wales, and the high rate prevalent in Ontario which is showing no tendency to decrease. In England the majority of the obstetrical cases are attended by midwives. Recently however, the English midwife has been given a course of training and is obliged by law to maintain a certain standard of proficiency and to refer cases presenting complications to an obstetrician. Further than this, in England they have a very extensive system of health education, and this I submit is the chief reason for their lower mortality rate. In the Province of Ontario we have inaugurated a

system of health education through public health nurses, which must eventually result in a lowering of our maternal death rate. In Toronto alone 129 public health nurses are employed and many other cities and towns have made the public health nurse a part of their municipal organization. In the province we have at present, working under the Maternal and Child Welfare Division of the Provincial Board of Health eighteen public health nurses who are assigned to various centers where they remain for periods varying from two to six months. During this time they endeavor to demonstrate to the community the value of the services of a public health nurse, and to have the municipality establish a permanent community nurse at the expiration of the demonstration by the departmental nurse. During the demonstration the nurses give instruction in practically every branch of public health, but especially do they stress the teaching of maternal and child welfare. They teach pregnant women that slight bleeding during pregnancy should be investigated; that headache is a danger signal not to be neglected; that swelling of the feet, hands, eyelids is a matter of concern; that cleanliness is of extreme importance in preparing for the labor, during the labor and in the after treatment; and that in every case the pregnant woman should select her medical attendant early, should keep closely in touch with him throughout, and should carry out his instructions to the letter for her own benefit.

When we get this teaching instilled into the public we will have fewer cases of eclampsia, fewer premature labors, and fewer cases of septicaemia, with a consequent marked lowering of our maternal mortality. This practical system of health education of the public must appeal to all present as striking at the fundamental cause of our high death rate in pregnant and parturient women, and on its extension we feel we must place the greatest dependence for a reduction to the irreducible minimum in this connection.

I thank you for your attention to this very imperfect presentation of a most important problem.

NOTE: The writer desires to express thanks to Mr. S. J. Manchester, the Director of Vital Statistics in the Dept. of Registrar General of Ontario, for the preparation of statistics and charts, used and presented herewith.

## DISCUSSION

Dr. Louis I. Dublin, Statistician, Metropolitan Life Insurance Company, New York: It is very gratifying to have heard so clear-cut a presentation of this subject. Dr Bell has had a good opportunity in a localized area to see clearly the

details of this most important public health problem. It is a little more difficult to do this in a larger country like the United States. Altogether, the conditions of maternal mortality are very much the same in the two countries. The Canadian rates are a little lower than they are in our country. In 1920, there were probably over 20,000 maternal deaths in continental United States, and that means a rate close to eight maternal deaths per thousand births. The figures vary somewhat from place to place. The rate in the City of New York is considerably lower. That city has a maternal death rate of a little under five per thousand births. As in Canada, our country has seen no improvement in the last ten years. The rates fall slightly, then promptly rise again. There seems to be a cycle running over three or four year periods. This is especially true of puerperal septicaemia. Some observers have noted that the rate for this condition rises and falls with the rise and fall of scarlet fever. Similar organisms are supposed to be involved, and, as the statistical parallelism is very marked, it would seem worth while to investigate this possibility further.

The important point for us, however, is that this last decade, which has seen such remarkable improvement in our control of so many of the preventable causes of death, has left us with virtually no improvement in the matter of maternal mortality. Yet, mind you, there has been this failure in spite of the work of this association, and in spite of the very general knowledge of the unfavorable situation throughout the country. The Children's Bureau, the public press, the women's clubs, and the visiting nurse associations have all concentrated on this condition and, apparently, they have accomplished nothing. I am especially disturbed by the fact that we have failed in spite of the determined efforts of the visiting nurse associations. Do you know that maternal nursing has become with the last few years the most important single activity of the public health nursing organizations? If the present tendency continues, close to one-half of the cases which nursing organizations take care of will be for the care of women in pregnancy or postpartum. In fact, there are already a number of large nursing organizations of the very best standing which give close to one-half of their nursing visits to women in pregnancy or postpartum. This was not so ten years ago. A tremendous interest has grown in the care of parturient women, stimulated largely by the work of this association and of the Children's Bureau, and yet we find ourselves at the end of the decade virtually where we were at the beginning.

We are very naturally interested in finding out why the situation continues so badly. We are all convinced that the maternal deaths are preventable, but we are not preventing them. We must, therefore, turn to the records of those associations that concentrate their efforts on the care of women in confinement, to see just what it is that accounts for our failure. I am familiar with the results of the work of one association whose records I have carefully studied, and I propose to tell you something about these results. This association has, during the last three or four years, carried out a very intensive demonstration in the care of pregnant women. It has developed a splendid routine and it has a very efficient staff of clinic and nursing personnel. For several years its annual budget ran close to about \$100,000. The records of the last two and one-half years were studied, covering a total of about 9,000 confinements. The findings, although at



hand for many months, have not yet been published. I feel, however, that I should be a party to a very grave wrong if I did not give you the benefit of the knowledge I have as the result of this study.

In the first place, we looked for a very marked decline in the mortality of the women under the care of the association. That did not occur. The maternal mortality among the 9,000 women was only a very little less than that in the general population of Manhattan Borough. There were four maternal deaths per thousand confinements. In some respects there were very gratifying results. The deaths from albuminuria and convulsions were only a third as many as usual. The prenatal work has reduced to the same marked degree the number of infant deaths from prematurity. The number of stillbirths was also appreciably reduced. This is all very important, but is practically all that was accomplished. The difficulty has been with septicaemia for the mothers and the difficulties of birth of the babies. The mortality from septicaemia was in fact higher among these women than it was in the city at large. And yet, here was a splendid service so far as prenatal work was concerned. We have a very striking example of the limitations of a purely prenatal service. The directors of the association apparently thought that all that was necessary was a prenatal service. They forgot that a perfectly splendid piece of prenatal work could be ruined through bad obstetrics. And that is exactly what happened. No provision had been made for the proper confinement of the patients, and, as might be expected, a large number of them necessarily made their arrangements with a few municipal hospitals which are apparently suffering from inadequate facilities both as to personnel and equipment. It was among these cases that the misfortunes occurred. There were 18 cases of fatal septicaemia in all, and 17 of these occurred among the hospital patients. The most careful examination of the record that we could make did not disclose that the responsibility for the misfortune could be shifted from the hospitals to any other agency which had previously cared for the patients.

The important point I wish to leave with you is that, in order to attack successfully the problem of maternal mortality, you must make ample provision for good obstetrical service in addition to the usual type of prenatal care. The prenatal service alone will not do the work. Prenatal work will do some things, but it will not do everything.

I do not wish to be misunderstood. I would be very much grieved if anything I have said were interpreted as a slur on the importance of prenatal work as it is done at present. There is no indication for lessening the emphasis on prenatal work, but rather for making it much more intensive. The prenatal service must change itself over into a complete maternal service if it would be successful. It must, in fact, find a means either for providing safe confinement service, or, through its affiliated agencies, it must be able to direct its patients toward a safe confinement. In many places this will mean that the prenatal service must undertake to improve the facilities of the maternity hospitals and of the other agencies providing obstetrical care.

## **ADMINISTRATION OF THE SHEPPARD-TOWNER ACT PLANS FOR MATERNAL CARE**

**GRACE ABBOTT**, Chief of the Children's Bureau, Department of Labor,  
Washington, D. C.

In the first place, I have to report that forty-two States have accepted the Sheppard-Towner Maternity and Infancy Act, and that forty-one of these are at work on a program of education in infant and maternal care. I am asked to speak this morning in regard to the plans the States have adopted for maternal care only.

Next, I want to remind you that the work to be done under the funds made available by the Maternity and Infancy Act is still only in process of organization. While the Act was passed last November, the first appropriation did not become available until April, 1922. It was, of course, impossible to plan with definiteness until this appropriation had been made; and while there had been some correspondence with the States, and some plans had been outlined, these were necessarily tentative until after Congress had made the appropriation which the Act authorized. After Congress had acted, the Federal Board of Maternal and Infant Hygiene met promptly and considered the plans that were submitted by the various States. There was some further delay in the actual payment of the money due to some decisions which had to be made in the Comptroller's Office, so that the first payments of money were in most cases not made until the last of May or the first of June, and in others not until July.

With the money in hand, many of the States have had difficulties in getting their work under way, particularly in those States where no work had already been done in this field. There was the difficulty of securing personnel, with which some States are still struggling; then a preliminary survey of local agencies was necessary in order to make the program for the entire State as much of a unit as possible, so that in a few States, plans have been as yet only paper plans, and the State field work will not actually begin for several weeks.

The Act intends, and this intention has been carried out both in letter and spirit, that the plans shall originate in the State, and they ought, of course, to be carefully adapted to meet local needs. The plans that have been submitted show much diversity, and yet there is in them all the same fundamental conception of the problem. All of them have, I think, seen it as a twofold one:

First, to secure an appreciation among women of what constitutes good prenatal and obstetrical care, and

Second, how to make available adequate community resources so that the women may have the type of care which they need and should be asking for.

It is, I think, appreciated that neither of these ends can be secured alone; thus, it is frequently said that women will get the kind of obstetrical care they demand, and that they can not expect that a type of service will be available which they are not asking for and will not utilize, if available. On the other hand, women would be regarded as unreasonable if they expected to secure a standard of care which is, as yet, impossible to obtain in the community in which they live. A program to be adapted to a State's needs ought to be based on a knowledge of what skill is available to the women in different parts of the State and to what extent that skill is being utilized by the women. It has been impractical and unnecessary for the States to wait until the facts on this subject are assembled before beginning work, since it is, unfortunately, possible for them to start with the premise that a very large per cent of mothers do not know that they should receive good prenatal and obstetrical care, or that they are not receiving it.

The Children's Bureau has secured from the Bureaus of Vital Statistics in a number of States and cities reports as to the proportion of births attended by midwives which is indicative of the type of care which is available and being accepted in many districts. The percentage ranged from 49.3 in Louisiana, exclusive of New Orleans, to 1.4 in Wyoming, as the following graph shows. (*Chart I.*)

## PER CENT OF BIRTHS ATTENDED BY MIDWIVES, BY STATES.

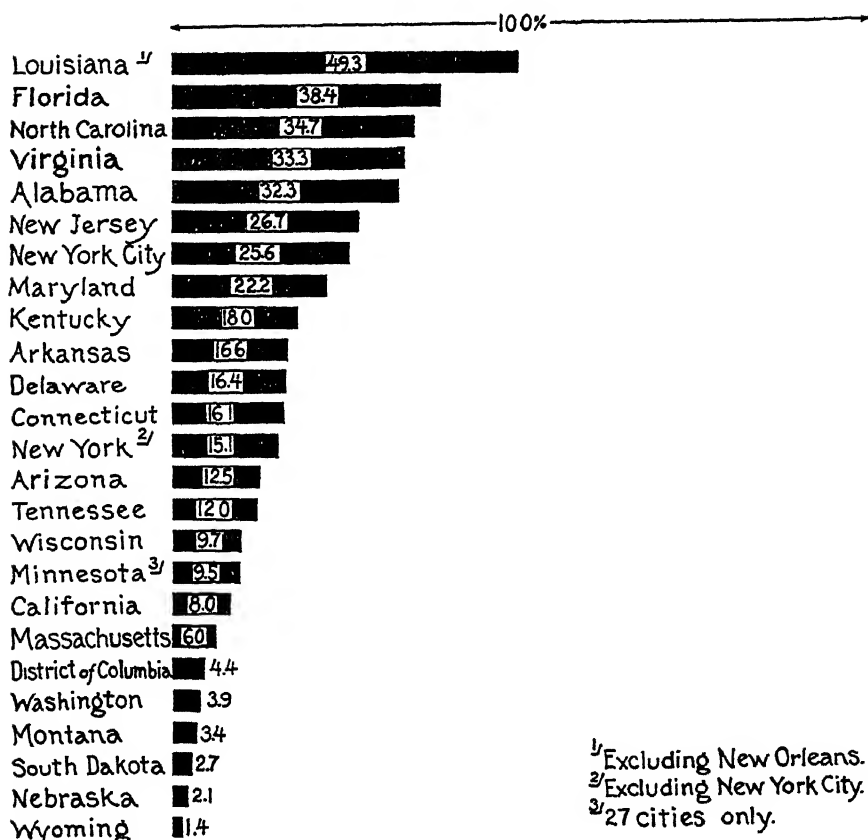


Chart I.

Based Upon Figures Furnished the Children's Bureau, U. S. Department of Labor, by Courtesy of Health and Vital Statistics Officers in the Several States.

## PER CENT OF BIRTHS ATTENDED BY MIDWIVES.

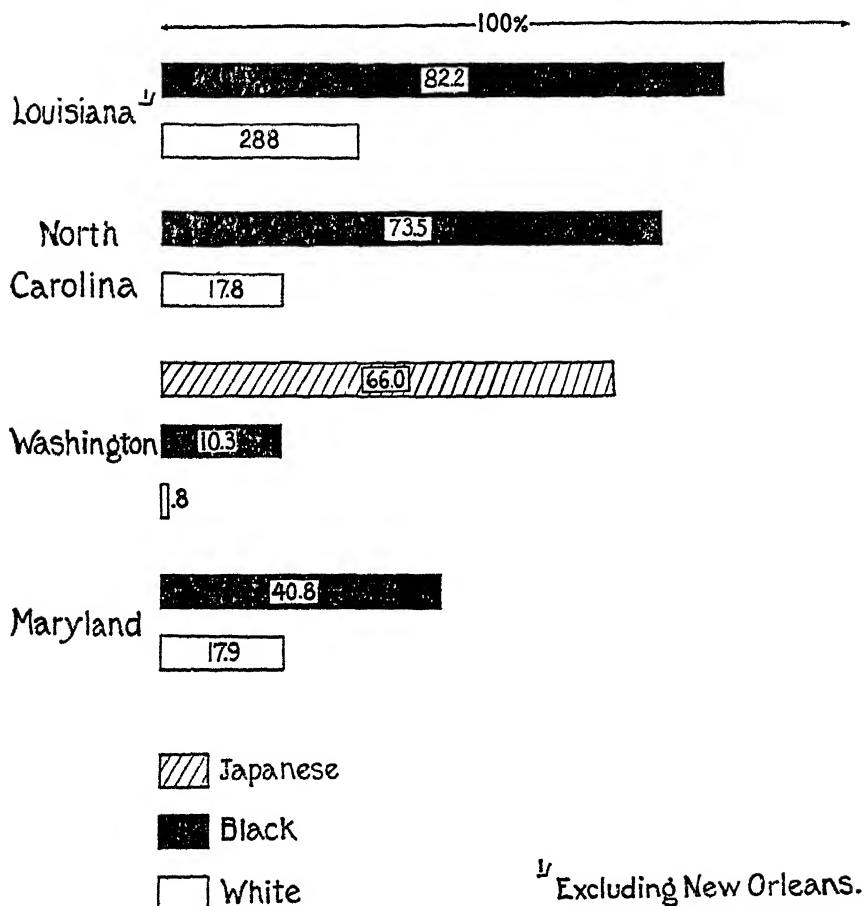


Chart II

Based Upon Figures Furnished the Children's Bureau, U. S. Department of Labor, by Courtesy of Health and Vital Statistics Officers in the Several States.

Averages for States need interpretation and individualization. Thus, in Louisiana among the negroes, 82.2 of the births are attended by midwives as compared with 28.8 among the whites; in North Carolina, 73.5 among the negroes as compared with 17.8 among the whites; in Maryland, 40.8 as compared with 17.9 among the white population; while in the State of Washington, 66.0 of the Japanese women as compared with 10.3 of the negroes and .8 of the white women employ midwives. (*Chart II.*)

It was possible to secure the proportion of births in hospitals for a number of states and cities from State or City Bureaus of Vital Statistics. These also show great local variations; thus 62.1 per cent of all births in Minneapolis occurred in hospitals, 18.7 per cent in Baltimore and 9.2 per cent in New Bedford, Massachusetts. In California 34.8 of all the births in the state are reported to have occurred in hospitals, while in Oklahoma the per cent was only 5. (*Charts III and IV.*)

But these figures do not, as the discussion of maternity homes and hospitals has shown, tell the whole story; much depends on the kind of hospital and the medical skill which the staff of the hospital afforded the mother. In some States the general lack of facilities for good care requires on the part of the Director of Child Hygiene not what was described yesterday as the "adaptive mind," that can fit in together all the resources that our great cities offer, but the "creative mind," that can work in the absence of resources of any kind. Many States are starting out with virgin soil as far as any public health work in maternal care is concerned, and they are of course planning quite differently from the States which are small in area, industrial in character, possessing easy communication between different parts of the State and many local resources. Each State administrator is confronted, not with a theory, but with a set of conditions. They have had to choose the more difficult task of going to communities where facilities were poorest, leaving to the larger communities responsibility for their own programs. They have, I think, all had a sense of immediacy about what they were doing, asking themselves what can be done for the women who are going to have babies this year and next, as well as how to provide proper obstetrical care in the future.

In fourteen States — Alabama, Delaware, Florida, Kentucky, Michigan, Mississippi, New Jersey, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Utah, and Virginia — they have concluded that licensing, inspecting, supervising, and instructing of midwives must be a necessary part of the program.

Surveys of midwifery are planned for in six other States — California, Connecticut, Idaho, Maryland, Missouri, and Nevada.

It may, perhaps, make it clearer if I indicate what some typical States are doing. I do this with considerable hesitancy because I am sure that there are present in the audience many persons who, if they were given the time, could set out their own plans much more successfully than could anyone in the Children's Bureau.

An eastern State which has sufficient funds to reach practically every expectant mother who desires instruction, plans to have the prenatal nurses in each county visit the home, invite the mothers to the center, instruct them in personal hygiene and hygiene of the home, exercise, diet, and so forth, explain to them how and what to prepare for the confinement, make urinalyses, and take blood pressure, and urge the women to arrange promptly for care by a physician.

A State which began with a prenatal program already under way will be able greatly to extend the number of prenatal clinics. These will be established where the cooperation of the local doctors is indicated and will be conducted by a doctor and a nurse. In this State an intensive piece of work with the midwives in two counties and a census of midwives of the State is in progress. During the very short time that this work has been carried on, more than 300 births attended by midwives, but not registered, have been found. This State, it should be remarked, is in the birth registration area.

A rich farming State of the Middle West, which is not in the birth registration area and has done no child hygiene work, proposes to promote maternal hygiene by: (1) Conferences with expectant mothers; (2) Classes on the Hygiene of Maternity; (3) Regular urinalyses during pregnancy; (4) Encouragement of adequate medical and nursing assistance at confinements in the homes, and of hospitalization when possible; (5) Providing medical and nursing assistance for those who can not otherwise obtain it, and follow-up work by the nursing staff after delivery; and (6) Encouraging postpartum examinations.

A southern State with approximately 6,000 midwives regards their instruction and supervision as a necessary part of its program. In addition to giving them such lessons in asepsis as they seem to be able to understand, acquainting them with their obligations to the parents and the necessity of registering all births, is also educating the women in the fundamentals of good prenatal care. In this work, public health nurses will be relied upon, visits to homes made, and provision of hospital facilities will be urged on local communities.

## PROPORTION OF BIRTHS IN HOSPITALS IN CERTAIN STATES.

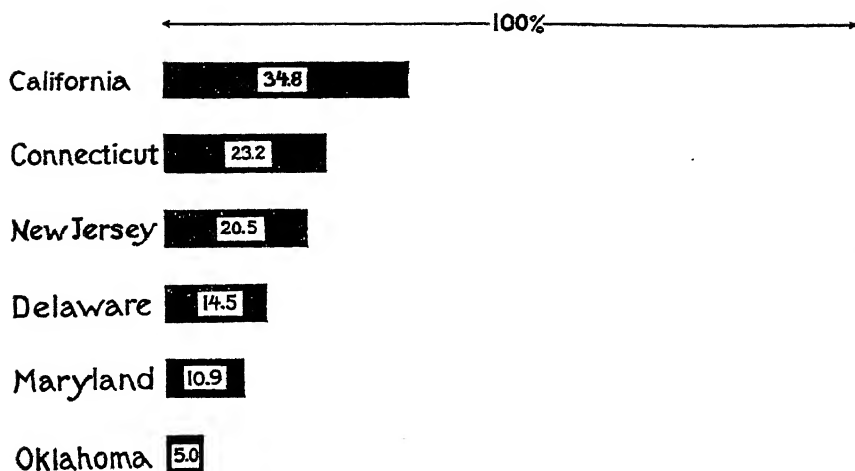
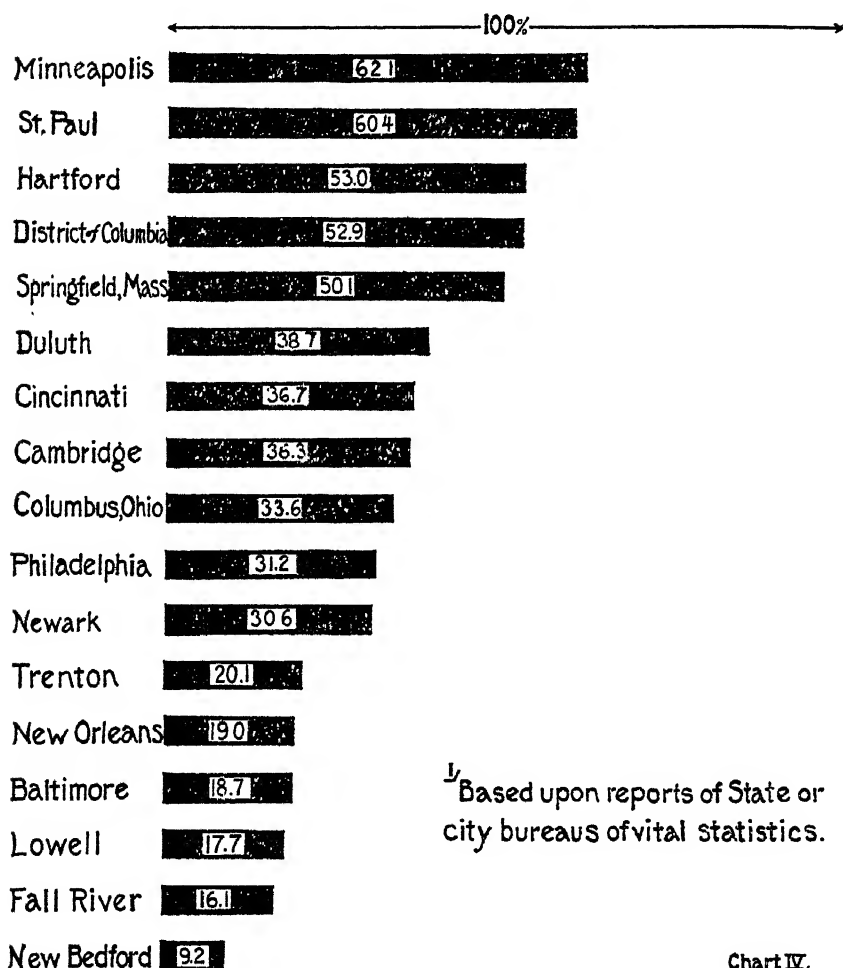


Chart III.

Based Upon Figures Furnished the Children's Bureau, U. S. Department of Labor, by Courtesy of Health and Vital Statistics Officers in the Several States.



# PROPORTION OF BIRTHS IN HOSPITALS IN CERTAIN CITIES.<sup>1</sup>



<sup>1</sup>Based upon reports of State or city bureaus of vital statistics.

Chart IV.

Based Upon Figures Furnished the Children's Bureau, U. S. Department of Labor, by Courtesy of Health and Vital Statistics Officers in the Several States.

A State in the Middle West plans to establish one maternity and child health center in every county at which regular conferences will be held. For these centers, cooperation of State and local agencies is assured.

A New England State will make a careful analysis of existing conditions before making its contacts with the individual mothers. Its plans include: (1) Compilation and tabulation of statistics so as to secure accurate and detailed knowledge of the distribution, causes and effects of maternal and infant mortality, and determine, statistically, the results of measures undertaken; (2) Surveys to determine the extent of available medical service in every community, including hospitals, physicians, nurses, midwives, clinics, boarding homes, and institutions; and (3) Medical service: to include medical advice for clinics and especially referred cases; medical supervision of midwives; medical inspection of institutions and arrangements for the laboratory service.

In spite of all the differences in State programs it might be said that there are five general lines of work being undertaken:

(1) The promotion of birth registration.

A number of the States which have accepted the Sheppard-Towner Act are not in the Birth Registration Area. It is, therefore, impossible for them to have the necessary fact basis for their programs. In such States, birth-registration is being stressed and it is hoped that the new interest created, especially among the women, by the Maternity and Infancy Act will lead to a much wider appreciation of the importance of birth registration.

(2) Cooperation between the health authorities and physicians, nurses, dentists, nutrition workers, and so forth.

(3) Establishment of infant welfare centers.

(4) Establishment of maternity centers.

(5) Educational classes for: (a) Mothers, (b) Little Mothers, (c) Midwives, and (d) Household assistants — mother's helpers.

I hope that in another year there will be an opportunity for a discussion by the Directors of Child Hygiene of the success they are having with these programs. I am sure they are all eager for the cooperation and interest of every agency and especially of the Child Hygiene Association in reducing the death and morbidity rate among mothers.

## DISCUSSION

**Dr. Hastings:** I am not going to discuss these papers. I am simply going to draw attention to a fact upon which it seems to me that the time has come for action. We have had this subject presented to us this morning in a most ideal and forceful way by Dr. Bell, and reinforced by Dr. Dublin, and then by Miss Abbott. This organization has been meeting for years. We have been talking for years just along the same line. If there is one country on the face of the earth that ought to feel more humiliated than another, it is this continent of America. Discussing this subject three-fourths of a century ago, one of your most renowned citizens, the late Dr. Oliver Wendell Holmes, appeared as the saviour of the women in his monograph on puerperal infection. What have we done? Crucify him over and over again by failing to carry this out. And here we are three-quarters of a century forward, and all we have to say is that, after the deliberations of this association, and ever since its incorporation, our percentage of deaths from puerperal infection is on the increase. Could you conceive of anything of any greater reflection on the intelligence of our people in regard to the proper appreciation of what we are really standing for? My opinion is, that this association should either get busy and do something in the shape of resolutions, and take a decided stand as regards what both the government and the profession should do along this line, or otherwise we had better simply die slumbering, inasmuch as we are only talking without results.

If there ever is a time in a woman's life in which she is entitled to the most tender care and the most skillful care, it is surely the time when she is performing that most sacred trust that any woman can possibly perform, and that is, the reproducing of her race. We have to bear in mind that "the hand that rocks the cradle rules the world!"

## **MEDICAL SESSION**

**FRANK LEECH, M. D., Washington, D. C., Presiding**

Dr. Leech: On behalf of the Medical Society of the District, and those of us who are interested in child work in the District of Columbia, it gives me pleasure to welcome you to Washington and to our building for one of your sessions. I certainly feel and have felt for many years that there's no work that is more important in the practice of medicine and among workers generally than child hygiene, and I think the amalgamation of the two national societies, which was done last night, means the work is going to progress in a way that it has never done before.

I have been delighted with the meetings that have been held at Continental Hall, and with the interest that has been shown in this important work. To have a large representation from a comparatively small body means that everybody is in earnest and is going to carry this work forward, and that we will get results as we have never done before.

The first paper on the program is "Child Hygiene in Relation to the Private Physician." I take great pleasure in introducing Dr. Borden Veeder, of St. Louis, Missouri, Associate in Pediatrics in Washington University.

## CHILD HYGIENE IN RELATION TO THE PRIVATE PHYSICIAN

BORDEN S. VEEDER, M. D., Professor of Clinical Pediatrics, Washington University School of Medicine, St. Louis.

I do not believe that any one — physician or layman — is opposed to the basic aims of the child hygiene movement; that is, the lowering of the mortality rate for infants and children and the prevention of sickness. In its origin the movement was largely medical and directed toward the study and prevention of specific diseases, as for example, the intestinal diseases of infancy; in its development the scope of the movement has become much broader and is directed chiefly to the rearing and development of a healthy race of infants and children. I do not feel that it is necessary before this audience to quote figures to prove that these objects and aims are being attained.

The methods so far employed may be grouped under three headings: First, the use of specific means, as for example the crusade for pure milk or the use of toxin-antitoxin in diphtheria. Second, educational methods. Under this heading are included such diverse items as propaganda through the press, the holding of health exhibits, the teaching of health habits to groups of children in the schools, and the visitation in the home by health workers. Third, the direct supervision of the infant and child by the physician through clinics, or — a better term — welfare conferences. It is extremely difficult to estimate the relative value of the methods employed as they are so largely interrelated. It is much more important to raise the question as to whether the methods in use are the best or the ones capable of producing the greatest possible results. It is along this line that I wish to discuss the subject that was assigned me by the Chairman of the Program Committee, although it may not be at all what the Chairman had in mind when the subject of Child Hygiene and the Private Physician was selected. Because of the time limitation I am restricting the discussion to the third general method that is the infant or child welfare conference.

The Infant Welfare Conference had its origin a few years ago in the establishment of summer clinics to care for sick infants with gastro-intestinal diseases. As an outgrowth of this all-the-year-round clinics were established in order to lessen the conditions which predisposed to the "summer diseases." As the work progressed it was found that the essential need was not a clinic for sick infants but a clinic for well infants, a place where the babies could be watched and the mothers guided and instructed in their care. Thus what started as a purely therapeutic or medical clinic gradually developed into a preventive medical conference. Many of the early clinics were established in connection with milk stations where pure and even free milk was distributed. This we know today is wrong in principle as the milk station exerts a bad psychological effect upon the nursing mothers. I mention these details to show the rapid change and evolution of the child hygiene movement. The pre-school clinic or conference had its origin in an attempt to save from waste much of the work of the infant conference, as experience showed that a large number of children developed physical defects between the time they left the supervision of the infant clinic and the time they entered school.

To my way of thinking there are certain inherent basic defects in the welfare conference where the infant or child is brought from time to time for examination by the physician and for advice and the physician's work supplemented by the home visitation of the nurse or social worker. First, the welfare clinic must limit itself to the well child, and this is the rule of the well run conference. Experience has shown that where the well child and the sick child mingle in the same clinic the greater part of the work and attention must be given to the sick child, and as the essential purpose of the welfare clinic is prevention rather than correction or therapeutic, the presence of the sick child defeats the very purpose of the conference. Furthermore, the mingling of sick children with well children is absolutely contraindicated from the medical standpoint. Thus we are confronted at once by an illogical situation. The conference physician is working to prevent the development of disease or conditions of which he has no personal or intimate knowledge and thus in many ways is groping in the dark. Every physician knows the interdependence of health and sickness. He cannot advise accurately regarding the prevention of disease tendencies in the individual child without knowing the reaction of the individual when sick. The observation of the child when sick is in

many instances the most important factor in determining what to do when the infant or child is well. All this is lost in large extent to the conference physician.

A second fault in the method is the failure of the physician to see the child in its normal every day surrounding. There is an intimate relationship between the physical condition of the child and its environment. To attempt, for example, to do nutritional work without a personal knowledge of the child's home, his parents, and his life, is not very satisfactory. The attempt to replace this personal touch with home visits by the nurse or social worker and to obtain a comprehensive picture from their written or personal reports is at best a most unsatisfactory and incomplete substitute.

Another element of weakness lies in the constant change in the clinic personnel. Not only does the child pass from one conference to another as he advances in age, as from the infant to the preschool period, but those of us who have had any experience with the executive end of the work realize the constant change taking place in the staff. No matter how complete the written record, the personal knowledge of the infant or child must be picked up anew by each physician. Even more frequent are the changes in the nursing staff. This lack of continuity of supervision as the infant develops into the child becomes more marked the more intensive the work of the health center becomes and is a difficulty that I am finding of increasing perplexity in our work.

Lastly, the conference method has a decided limitation in the number of children reached. Only a small proportion are enrolled in a given district or community. Welfare clinics have been free as a rule and are usually classed among the "charities". Some clinics have fixed rules limiting the attendance to those children unable to pay for a physician's services, and yet those of us who have worked both in the free conference and in private work realize that there is just as much need of health work among the children of the middle and well-to-do classes of society.

To my mind the best results can be obtained only if there is direct and constant supervision of the child through infancy and childhood by the same physician; by the physician who sees the child in sickness as well as in health, and who has an intimate and personal knowledge of its parents, its home life and the daily environment, its play and companions. Without a full knowledge of all of these factors the value



of direct supervision is limited and handicapped. Furthermore, this supervision must reach the children of all classes and not be limited to the economically dependent. If my objections and conclusions are valid, there is but one logical deduction and that is that the person in the ideal position to supervise the health and welfare of the infant and child is the private physician—the man in general practice.

If this is true the question naturally arises, why then is this work not done by the private physician? Why the necessity for the welfare clinic or conference? The answer is simple—unfortunately the vast majority of physicians in private practice are not qualified to supervise the development of the infant and child. Few recognize the importance, fewer still are interested, and most important, even fewer have been trained to apply in general practice the methods which have met with such success in infant and child hygiene work. The last thing I have in mind in making this statement is an unpleasant or undeserved criticism of the practitioner of medicine. It is a simple statement of fact that is apparent to those who have been interested in child hygiene work. One of the most frequent statements made to me by parents is to the effect that, “Dr. —, our physician, is fine when the children are sick but he has no interest in the children at other times.” The mothers of to-day have been educated to ask for these things and the private physician has not been educated to give them. Twenty-five per cent of the infants coming to the welfare clinics in St. Louis on condensed milk food had been taken from the breast and put on condensed milk by physicians in private practice.

I think the fault or blame lies in the training and education of the private physician. In the past, and the same holds to a large extent at present, our medical students have been trained to think in terms of disease rather than health. Our teaching has been almost entirely in hospitals or dispensaries and the teaching has been almost exclusively the recognition and treatment of pathological conditions. Such teaching as the student has received in hygiene or health has been of an abstract nature and not as concretely applied to the individual. The lack of knowledge on the part of the private physician in regard to the hygiene and development of the infant and child is the fault of the physician's training—not of the physician. There must be a distinct change in the character of our pediatric teaching and this change is already taking place in our better medical schools. Instead of

spending hours over the classification and pathologic physiology of the nutritional diseases of infancy the point that must be emphasized and driven home is the care and feeding of the normal infant—the prevention of disease must be stressed equally with the pathogenesis, diagnosis, and treatment. When this is done we will have a group of men in our community capable of and interested in giving ideal supervision to the infant and child. We cannot with reason expect this change to take place over night. As I have tried to point out above, the methods themselves have been gradually evolving. To ask or expect the entire group of busy practitioners of medicine to suddenly shift their entire attitude is to ask and to expect too much. Some of us are familiar with the difficulty as applied to many of the pediatricians themselves. If the principles and practices of child hygiene are as important as we believe them to be, the situation will automatically correct itself in time.

Relatively speaking the method of the welfare conference is a very recent innovation. Its permanency is a thing that only time alone can answer. As I have tried to point out it seems to me to have very definite defects and the ideal supervision of the child and application of the methods of child hygiene will be reached in another way. But the welfare conference has given results and until the time comes when, as a result of his medical school training, the private physician can do the same type of work which the conference is trying to do, the conference has a definite basis for existence. When this time does arrive, like many other temporary expedients, the clinic or conference will be largely discontinued or the scope and character of its work will undergo decided modification. As an organization the Child Hygiene Association should direct a large part of its efforts not only to the education of the laity but to increasing interest in the education of the private physician and the medical student in child hygiene work.

## DISCUSSION

**Dr. Edgar J. Huenekens, Director of Infant Work, Minneapolis Infant Welfare Society:** This is a burning question, and one that has not been sufficiently discussed in the past. I think that the pediatrician is in a peculiar position to be able to judge of both sides of the question. On the one hand, he hears the grumblings of the medical profession that a great deal of this work takes away from his private practice. On the other hand, he hears the complaints of social

service workers, nurses, and so forth, that private physicians are too narrow to be interested in preventive medicine. I think that there is a happy medium between which these two apparently irreconcilable things can be accomplished. In the first place, infant and child welfare work, as exemplified in our infant and child clinics must and should be continued, but they may have to be modified. I think that at the present time one great difficulty in the conduct of our clinics is that they are hybrid; they are partly educational and partly relief. And it is the mixture of these two things which constitute part of the difficulty.

I have been connected with infant welfare clinics in Minneapolis for ten years, and as a result of my connection with that work, my opinion of this problem has been undergoing a gradual change. I feel that something of this kind can be worked out; that in the beginning, when infant and child welfare clinics are established, for a short period they should be open to everyone regardless of financial circumstances, merely as an educational measure to show the value of such work to a community. However, as this demonstration proceeds, the work should be more and more limited to people of poor economic circumstances. The actual examination of infants at intervals is now being done in private practice by many physicians, and people who can afford to pay should be referred to such physicians rather than allowed to be a charge on the philanthropy of the community.

I presume that most of you have read a very suggestive article, published in the *Atlantic* a year ago, by Ida Cannon, entitled, "Philanthropic Doubts." It is an article, I know, that has caused a great deal of controversy. Personally, I think that there is a great deal to be said for the position that Mrs. Cannon takes. Since reading that article I have given the matter a great deal of thought and feel that not only preventive health measures but a large percentage of the social service work should be tried by private enterprise and demonstrated to the community, and then after a longer or shorter period should be dropped, unless there is enough public support to cause that to be done by public taxation. That is true, especially of those measures which involve a certain amount of relief. Where it is purely educational, then I do not say so. This thing must be discussed. This question—this whole question of the relation of the medical profession to preventive health measures, must be discussed more and more frankly, both by physicians and by people interested in the work; and I would especially make a plea to the medical profession to take this up in their medical meetings more than they have in the past.

**Dr. John A. Foote, Washington, D. C.:** This question that is being discussed to-day and that was presented in such a masterly manner by Dr. Veeder, is not by any means a new one at the annual meeting of this association. Dr. Joseph Wall read a very splendid resume on the question of how to interest the private physician in child hygiene work at the Asheville meeting, covering a phase of this question which I think after all is perhaps one of the biggest problems that we have.

Dr. Veeder spoke of some of the conditions, one of them being lack of preventive medicine education in the medical school. Perhaps there is something in that; and yet, after all, there were many other things that have come up since many of us present were educated in the practice of medicine, newer knowledge

that has been acquired by us, because we thought that we ought to acquire it and because we were interested in that particular thing. There is no dearth of literature and no dearth of opportunity for any physician to learn child hygiene if he takes interest in it, even though it had been neglected by his medical school.

Now of course we have this other phase, the fact that he is so busy in treating sick people that the physician does not have time to take care of advising mothers in the care of their children; and yet the public is willing to pay for that advice if they could get it. There are some physicians who are confused and appalled by the bogey of state medicine. The average physician is busy and may not take time to inquire into these things, and so many confuse child hygiene work with state medicine. We all know it is a different thing, and that child hygiene education is perhaps one of the best antidotes that could be given against the coming of state control of medical matters. But if the people want preventive medical education, and they cannot get it from the source they should get it, their medical adviser, they will be obliged to turn to the city or state institution for help. The relation of the physician to the patient has changed somewhat with the growth of cities. We have been shaken up by the war. It has frequently been said that the war has changed our social values, but our social values were changing when the war came along and it only helped to change them. People in the large cities do not have the direct contact with the physician as in the village. He does not know his clientele as in the closer relationship of less populous centers, and the bond of confidence is more or less, you might say, dissolved. Perhaps this is why the city dweller will go sometimes to the organization rather than to the individual. But one thing the physician must realize and that is that the physician must be the leader in every health movement for the good of the community.

No better education can be given the child than to remember being brought to his physician and learning how he should be kept well. He is not going to run after false medical gods if his psychology is attended to when he is young enough. That is a very important point, and the medical profession should be interested in it from the point of looking forward to what is really best for them in the future. We must not fail to look ahead; we must try to be like the Scotchman who, when his wife died, called the servant immediately and said, "Mary your mistress died during the night, so you may cook only one egg tomorrow."

**Dr. B. Franklin Royer, Massachusetts-Halifax Health Commission, Halifax, N. S.:** May I take just a moment of time to say something of a program that we are trying to adapt into the community's needs in Halifax, Nova Scotia. It fits in admirably with the particular thing so well discussed by Dr. Veeder, namely, that of trying to have the private physician fitted into his proper relationship in the niche of preventive medicine.

Our work in Halifax was financed for a period of five years in advance, and as many of you know is for the most part financed from a Massachusetts fund not required for relief following the great ship disaster.

We aim to cover all of an ideal preventive medicine campaign with our health centers, public health nurses, and the various types of clinics, welfare and otherwise. I shall only speak in particular of one phase of the work. When it came to projecting something in that community that would have a far-reaching effect

in the future, a lesson that would be lasting in its impression, that would carry on long after the special fund was expended, it was contemplated that perhaps it could best be done by interesting the physicians who studied and practised in Halifax in the future.

It was proposed to the Rockefeller Foundation by Dalhousie University at the time a fund was being apportioned for medical education in Canada, that a health center be planned as a university institution, to be staffed on one side entirely by the medical teachers of the university and on the other to be staffed by public health nurses, and to have the health center operate as a place where the student of medicine would get the whole public health history of the family along with the study of curative medicine. The plan would include having the medical student go back into the home and figure out and confirm all those domestic causes of disease, and if you please substitute or witness substitution for them by a public health nurse, of those things that are helpful during infant life, child life, or at all periods of life.

It happened that in Halifax there were three hospitals already located in the vicinity of the medical school, a maternity hospital, nearing completion, a general hospital, and a children's hospital. It required but a little convincing argument to have the city locate in the immediate vicinity a contemplated fifty-bed tuberculosis hospital. The university owned a lot of ground in the immediate vicinity almost in the center of the area on which they proposed to locate the health center.

None of these hospitals had yet organized out-patient departments, hence the health center to serve this need. The proposal was accepted by the local authorities and by the Rockefeller Foundation. The university is now building an institution that is ideally planned for medical teaching, for health center teaching, for the carrying on of welfare work in one-half of the city, and have it all done in full view of every student of medicine and of dentistry that studies there.

Dalhousie University Medical School is the only medical school for the three maritime provinces and Newfoundland. That means for the northeastern part of the continent the student of medicine will, for the first time while still a medical student, have an opportunity to get that viewpoint without which no man can do actual and counting work in child hygiene.

It will be quite one year before the new plan of teaching is organized. The health center building is now up to the second story. It has been planned with the advice and help of such men as Michael Davis of New York City, and with due regard to the "lay-out" of teaching rooms in relation to each other, to the general conference room, and so forth.

The Rockefeller Foundation quickly saw that with that kind of medical touch, with public health teaching, and curative medicine, all in one institution, students of medicine would get the particular viewpoint Dr. Veeder would like to have the physicians get and carry home to their respective communities.

I think this pioneer work in health center teaching will bear careful watching. It seems to offer an ideal grouping of medical and health teaching (curative and preventive medicine) in a way that you will all be glad to follow.

**Dr. W. J. Bell, Maternal and Child Welfare Bureau, Ontario Provincial Board of Health, Toronto, Canada:** I would like first to express my very great appreciation of the excellent paper read by Dr. Veeder on this important subject. This

was one of the important matters that I came to this convention to hear discussed and I have been immensely repaid for coming in hearing the matter that Dr. Veeder has placed before the conference this afternoon. I was very much impressed with the distinction Dr. Veeder drew between the well baby and the sick baby at the well baby conference. Child welfare work can be wrecked, absolutely wrecked, by administering material relief and treating sick babies at the well baby clinic. In child welfare, and particularly in child hygiene, our aim is to promote the normal to obviate the abnormal, but to take no hand whatever in the relief, alleviation, or cure of the abnormal; that work pertains entirely to the private physician and should be left to the private physician.

What should be the purpose of our child hygiene work and of our child welfare work? I think it should be mainly the education of the public. In our organization we should get away from that idea of educating the physician. If the public are educated the physician will be stimulated to respond to any demand that the public may present. Physicians are not different from any other class of men in that respect, and the demand created will be satisfied. We hear a good deal about the physician's lack of qualifications. The physician will rise and will qualify himself further whenever he sees an opportunity to benefit himself by so doing. Physicians are called on frequently in a philanthropic way; much too frequently the physician is called on for philanthropy. The physician does not support himself or his family on philanthropy.

There is quite a conflict continually going on in connection with child hygiene. In the first place, the physician in child hygiene is frequently in conflict with his confreres who are not in that particular work, and that conflict in certain parts of the country is so acute that life is almost miserable for the child welfare man. Further than that the physician in child hygiene is frequently in conflict with himself. I was talking a short time ago to a man who has been conducting a child hygiene clinic. The man said to me, "I am going to quit this work." I said, "Why! don't you like it?" "Like it, I love it, but," he says, "I am overwhelmed with patients when I am conducting a child welfare clinic. They know that I know something about child health and diseases in children and they bring them all to the clinic. They bring to me at the clinic cases that should come to my office. These are coming to my free clinic and my income is being cut to an alarming extent. I should be living well off my knowledge of pediatrics, instead of that I am giving the major portion of what I have in pediatrics for the public benefit." Now, this is a most important aspect of child hygiene and the child hygiene clinic which must be considered and considered very carefully. I see only one remedy for it and that is the employment of full-time physicians, well qualified in pediatrics, to conduct child hygiene clinics. I do not see how we shall get over the matter in any other way. I am extremely interested in this special matter because I am engaged as a full-time official in child hygiene. My opinion is that at the present time the work can best be done by regular weekly conferences with the public health nurse and occasional clinics, with a full-time paid child welfare physician.

**Dr. George M. Kober, Washington, D. C.:** I merely wish to emphasize the suggestion presented by the last speaker, with one qualification, that even the full-time salaried man in child welfare work should limit his work, so far as the

remedial action is concerned, to dependent classes. I fully endorse the idea that the educational work should be free to all, but free medical care and treatment for the correction of physical defects should never be extended to children of parents able to pay for the same.

**Dr. Henry F. Helmholtz, Mayo Clinic, Rochester, Minnesota:** There are just two points that I should like to emphasize in this very interesting and instructive paper of Dr. Veeder's. The first is the medical conduct of the health conference. It seems to me that the difficulty lies in the conduct of these conferences. The average medical man is so centered on the cure of disease that it is difficult for him to have the attitude of mind that he is necessary to take care of the well child and instruct his parents how to keep the well child well. In ten years' experience of this kind in Chicago, the infractions of all other rules were as nothing compared with the tendency of the physicians in the stations to take care of the sick. In spite of written rules, in spite of constant attention to the fact that they are not allowed to take care of the sick child, it was constantly reported in practically every station that they were taking care of minor ills of the well babies that were coming to the station.

It seems to me this is one thing that we as organizations and welfare workers must be insistent about, that these are educational institutions, that it is in function to educate the mothers how to take care of their well children and leave the care of the sick to the medical profession.

Just one other point, and that is with regard to the part that the medical profession as a whole is playing in the campaign of child welfare and child hygiene. I'd like to ask one of the nurses how she would like to take on a woman that had graduated fifteen or twenty years ago, as a public health nurse, by giving her two or three lectures on public health and then turning her loose on the community. This is what we are expecting of the private physician. We are going to give him a few lectures on how to take care of the well baby, the well child, and then he can go out and do it. Here again experience is of great advantage. Young men that we have had working in these stations over five and six months have been unable to get the idea of what it is all about, namely, that we were taking care of the well baby. They were always looking for the sick child that was coming to the conferences, and that was the child they were going to care for. Now a man that has been out in practice for ten or fifteen years is so deep down in the rut that he is caring for the sick with the idea of caring for the normal individual, is something entirely foreign to him; and it seems to me that if we are going to accomplish anything along this line, that we have got to go about it in an entirely different way than we are doing at the present time. It's no small matter; it's a very difficult thing to do, to get the public health attitude of mind; and it seems to me that all this talk that we have had in the last few days about educating the doctor, and how he is taking no interest in this matter of public health, is beside the point. We can't educate him into a new point of view over night.

**Dr. Charles J. Hastings, Medical Officer of Health, Department of Public Health, Toronto, Canada:** I don't want to Canadianize this too much (laughter), however I would like to express the fact that my experience in connection with the

medical profession in Toronto is somewhat different from that of their experience in Chicago. I have felt ever since being connected with the Department of Health—and I might say that I practiced for over twenty years before going into preventive medicine, and therefore I am familiar with the difficulties and how to meet the general practitioner on common ground—I look upon the medical profession, the Academy of Medicine, as the most valuable asset I have to-day. There is no activity in connection with the Department of Health that I have not been assured, year by year, from the Academy of Medicine, that they are behind me. And I received a communication from the newly elected president of the Academy before coming down, stating that if there was anything they could do to help me with the work I am doing, they wanted to be called upon. And so far as the general practitioners' attitude towards prevention is concerned, I think that it is most commendable.

Dr. Veeder (closing discussion): There are just two things I wish to say in closing. The first is that it is extremely difficult to get anywhere on this subject with one paper. It is a many-sided question and a very vital one with our work at the present time, and I believe that we could with profit to ourselves devote an entire session to the discussion of the problem. The second thing is one that I did not wish to put into my paper because I do not wish to put it down formally in writing, and that is that one of the chief difficulties that we have in obtaining the cooperation of the general practitioners has been their resentment of the criticism by the social worker and the nurse employed in child welfare and child health work. To my mind it is one of the most serious problems that we have to deal with. I know very well that it is difficult at times for a nurse or social worker not to express an opinion to other workers or to a clinic physician in criticism of the other doctor, and at times that criticism is deserved, but nevertheless it is one of the things that keeps up a point of irritation and it does not help us at all in our work. I did not want to put this in the body of my paper, but am just speaking of it here with my friends in child welfare work, and I sincerely hope that those of you who have charge of child welfare and child health work and are executives on the staff will try, when you go home, to keep your various workers from expressing criticism of the private practitioner, and if you do this I am sure we have accomplished something that is worth while.



## THE SCHICK REACTION AND DIPHTHERIA TOXIN-ANTI-TOXIN, THEIR CHARACTERISTICS AND THE RESULTS OF THEIR USE

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### THE SCHICK REACTION

The principle of the Schick reaction is very simple. For a number of years we have used the skin of guinea pigs as an index of the neutralization of the standard dose of toxin by the antitoxin in testing the antitoxic potency of the serum from horses immunized against diphtheria toxin. The skin is so dense a tissue that it holds substances injected into it for a considerable length of time. If in a test the mixed toxin and antitoxin has an excess of toxin, the skin of the guinea pig adjacent to it is irritated. If there is an excess of antitoxin in the mixture, no inflammatory action results and therefore no hyperaemic spot appears. In our investigations on natural antitoxic immunity in man we took bleedings from children and adults and tested these for antitoxin by the method just described.

The idea occurred to Schick that instead of taking blood samples from human beings to test in an experimental way whether they had natural or acquired antitoxin, it might be possible to introduce a tiny but definite amount of diphtheria toxin in the skin. If this toxin met in the skin fluids an amount of antitoxin sufficient to insure immunity, it would be neutralized, but if there were an insufficient amount of antitoxin, the toxin would be held in the skin more or less unneutralized and just as in the case of the laboratory animal in which a toxic mixture had been introduced, the skin would be irritated and a bright red spot would develop.

Hundred of thousands of tests during the past ten years have proven beyond doubt that Schick developed an accurate test for the presence or absence of diphtheria antitoxin in the body. Careful investigation has demonstrated that if the blood contains adequate antitoxin for immunity there will be sufficient in the fluids of the skin

to neutralize the standard test dose of toxin. It is evident that if this test is to be employed, sufficient toxin must be injected to cause irritation if insufficient antitoxin is present. It is also equally important that an excessive amount should not be given for then even an amount of antitoxin in the skin sufficient to insure protection would be insufficient to neutralize the overdose of toxin.

Experience has taught that the proper dose of toxin is 1/40th of the amount that would kill a guinea pig weighing 250 grams. This is given in 2/10th of a cc. of salt solution. If we prefer to exactly follow Schick's directions we would give 1/50th of a fatal dose in 1/10th of a cc. . These two mixtures produce equal results. The larger amount of fluid spreads the toxin in a larger area of the skin and so meets a larger amount of skin plasma and requires slightly more toxin to give a comparable result. The practical use of the Schick test has shown that errors may readily creep in which are most confusing. The technic of the Schick test is very simple but it must be carried out with the greatest care. If the fine needle penetrates too deeply the layers of the skin, the fluid escapes into the subcutaneous tissue, is not retained, and its proper action on the skin does not develop. As all of you who have seen the Schick test or have performed it know, the sign of the correct administration of the injection is the raised small whitish area which develops because of the entrance and holding of the fluid in the skin. When this appears, we are certain that the correct technic has been employed.

The other and more serious error has been due to a fact recently learned that many forms of glass cause a deterioration of the diphtheria toxin in contact with it. The laboratory has put the right amount of toxin into the vial or into the capillary tube, but within the course of two or three weeks, the potency of the toxin may have dropped more than 50 per cent. The use by many of weakened toxin naturally has led to conflicting results and has caused some persons to believe that children showing a negative Schick test at one time show a positive test at another. With toxin of uniform strength the results of repeated tests properly carried out on the same persons have shown very remarkable similarity. In fact, after years of experience in following up a number of thousands of children, I am convinced that there is a remarkable persistency of antitoxin in those who have developed it. In the course of five years we have not found a fluctuation as shown by

a change in the Schick test in more than five per cent of the retested children and even when it occurs there is some doubt as to whether the toxin which was used was always of equal potency. If we grant, as I think we are justified in doing, that the Schick test is one of great accuracy and that children after the age of three who show a negative Schick test have the promise of a life long immunity, what is the value of this test in the prevention of diphtheria? This test is used for a two-fold purpose. First, to give the knowledge of security to those who develop negative reaction, and second, to prevent the unnecessary use of the immunizing injections. It certainly is of great value under many conditions to know that a child is immune and for this reason alone, the Schick test is well worth while. For instance, a physician found that his wife had a mild diphtheria. He had very recently done a Schick test on his year and one-half old baby. The question was whether to give antitoxin to the baby with the possible development of an annoying rash. The fact that the baby had recently had a negative Schick test made it safe to withhold the serum. Second, as an index of the need of giving the immunizing injections the Schick test is of the greatest value. The importance of the Schick test becomes greater with age but even in young children between three and six years of age in which the majority will require the injections, it is still of value because it not only prevents the giving of the toxin-antitoxin to about a third, but it gives the knowledge that they are safe, which the injections without a later Schick test can not give. Many health departments, in order to facilitate the use of the toxin-antitoxin injections, suggest that in children under six and even in older children a Schick test may be omitted. Undoubtedly there are many conditions in which this advice is good but we must remember that in these children who receive the injections no positive statement can be made that they are immune without a Schick test, so that the earlier Schick test not only saves them from the immunizing injections but also gives the assurance which can not be obtained without a Schick test.

#### THE CONTROL TO THE SCHICK TEST

Among older children and adults there are occasionally cases in which a reaction to the injection somewhat similar to the Schick test follows this injection which is due not to the toxin but to the protein in the solution. This places about five per cent of the probably positive

reactions in doubt. To overcome this, an intracutaneous injection is given at another spot of an equal amount of the heated toxin. The heat destroys the toxin but leaves the protein practically unaltered. If the reaction was due to toxin, this heated toxin will give no response, but if to this protein, the reaction will appear. For accurate work this Schick control should be given in children over six years of age. If we do not inject the control solution we should immunize all doubtful as well as clearly positive reactions. In the older children and in adults even the control test may not suffice to absolutely settle the nature of the reactions because in perhaps two per cent of these the protein reaction is so marked and persistent that it is impossible to be sure that this is not a combined protein and toxin reaction at the point of the Schick test even though the reaction to the heated toxin seems as marked as that to the unaltered toxin.

#### THE TOXIN-ANTITOXIN INJECTIONS

Since the founding of this country the prevention of diphtheria has occupied the attention of health authorities. The discovery of the diphtheria bacillus and of antitoxin added to our means of preventing it and of stopping the disease when developed. At the present time the death rate is not more than one-sixth of what it was thirty years ago and in some localities, not more than one-tenth. The number of cases has, however, been reduced probably not over one-third. Until two years ago the number of deaths each year in New York remained above 1,200 and the number of cases remained about 12,000 to 15,000 annually. Indeed in many parts of the country, diphtheria has been slightly increasing during the last few years. These facts impressed health authorities and laboratory workers and made them realize that we had accomplished about all that could be hoped for from our present measures and influenced them to welcome a test of the value of active immunization through toxin modified by antitoxin. This modified toxin had been successfully used to immunize the different domestic animals.

The development in 1913 of the Schick test made it practicable to apply in man the results of our animal experiments and to test out the immunizing value in children of toxin-antitoxin. The fact that von Behring injected the toxin-antitoxin mixture into a small number of children without harmful effect made us the more ready to carry out the investigation. In New York we tested the children to the number

of over 10,000 in a number of institutions and gave those who showed a positive reaction three immunizing injections. A retest three to four months later showed about 85 per cent of these had developed sufficient antitoxin to give a negative Schick test; a second series of injections in the refractory children caused in them also a satisfactory response. These children have been Schick-tested from year to year for a period of six years and with very few exceptions those of these children who have remained accessible have continued to show a negative reaction. It is also true that very few suspected cases and no clinically undoubted cases of diphtheria have developed among the children who gave a negative Schick test or who received the injections. Although among the older children a number of those injected showed for a day or two rather sore arms, and a few of these a rise of temperature and headache, no serious results ever occurred. Encouraged by these results we began two years ago the immunization of the school children in New York City on a large scale. The Health Department set apart ten physicians and ten nurses to carry on the work. They were under the direct supervision of Doctors Schroder and Zingher. Previous to this the children in a number of schools and about 1,000 of little children attending the baby health stations had been treated. Up to the present time over 300,000 children have been tested, and when it was indicated, treated with the injections. There have been no bad results except the temporary soreness and an occasional rise of temperature and headache. During 1922, the number of cases of diphtheria in the city as a whole is 20 per cent less than the average during the past three years and the number of deaths has been reduced one-quarter. In all probability this improvement is due not wholly to the immunizing injections given by the Health Department physicians and to those given in addition by private physicians but also through the general interest in diphtheria aroused by giving circulars of information to two-thirds of all the school children of the city and to a great many of the mothers bringing their babies to infant health stations. That the value of the injections is very real is shown by the fact that four times as many cases of suspected diphtheria have developed among 90,000 school children who were not tested as among 90,000 children in the same schools who were Schick-tested and when necessary injected with the toxin-antitoxin. Not one of the children who were known to be originally Schick-negative, or were so on a retest made after the injec-

tions, developed a case of undoubted clinical diphtheria. The cases of suspected diphtheria reported as occurring among the 180,000 children were as follows:

	Cases reported by private physicians as clinical diphtheria
In Brooklyn:	
26,000 originally Schick-negative children (observation from October 1 to February 15).....	2
15,000 Schick-positive children, 3, 2 or 1 toxin-antitoxin injections .....	4
40,000 control children of same ages.....	27
In Manhattan:	
31,000 Schick-negative children (observation from October 1 to April 1).....	4
19,000 Schick-positive children, 3, 2, or 1 injections....	7
50,000 control children.....	43
Summary:	
57,000 Schick-negative children (observation from October 1 to February 15).....	6
33,000 Schick-positive children injected with toxin-antitoxin .....	11
Among a total of 90,000 Schick-negative or injected children .....	17
Among a total of 90,000 control children untreated....	70

The only reasonable objection that can be made to these immunizing injections is the amount of annoyance which occurs in about five per cent of the older children who receive them. The inflammatory reaction which in the most susceptible develops a swollen and painful area of three or four inches in diameter, is due to the protein of the diphtheria bacilli and not to the toxin itself. Up to the present time we have been unable to remove this bacillus protein from the toxin-antitoxin.

Recently, owing to some experimental work which was carried out on a large number of animals, we decided to reduce proportionately the amount of toxin and the antitoxin. This left unaltered the toxicity of the mixture. The new preparation, like the old, caused severe and often fatal paralysis in guinea pigs receiving one cc. The results in children have been equally good so far as immunization is concerned, while the constitutional disturbance has been absent and the local reaction has been very much less.

Dr. M. C. Schroeder, who has charge of the work in Brooklyn, has recently brought me the results of the retests among the scholars who

had been injected in fifteen schools. In most of these schools half the scholars received the old preparation and half the new. The immunizing results were exceedingly good with both preparations and averaged about 90 per cent. The local reactions were very much less with the new preparation. These results have encouraged us to go ahead, and recently the Board of Estimate appropriated \$25,000 to establish a permanent immunizing force, so that diphtheria is now placed on the same basis as smallpox. Within a few years it will probably be required that every child entering school will be required to present a certificate of immunity or in the absence of this to receive a Schick test, and when indicated, the injections. We expect before next summer that every child attending the public and parochial schools will have received a circular and a consent slip, and that over 500,000 school children will have been Schick-tested, and when positive, immunized.

During the summer, when we made an attempt to immunize the pre-school population, we made the baby health stations and the mothers and babies playgrounds the chief center for carrying on this work. Some 7,500 children, between the ages of six months and six years, have been tested or immunized. We find it very much more difficult and expensive to gain access to the young children than to those at schools. The cost of immunizing one child of pre-school age was about 75 cents, while for a school child it was but 20 cents. Undoubtedly our main reliance must be on the private physicians for the immunization of the pre-school population. The work in the schools, while it affects children who have passed the age of greatest danger, is of the utmost importance. Immunization of school children, besides preventing a few deaths and many cases of diphtheria, would also, in doing so, prevent to a large extent diphtheria being taken from a school to the home. The consideration by parents of the question of having the child at school immunized prepares their minds to have the younger children done by the family physician. I believe the time is not far distant when the majority of parents will give their approval that their children receive the immunizing injections near the end of their first year. If this becomes a general practice, I believe that diphtheria will become a rare disease.

**Dr. John Hart Davis, Mansfield, Ohio:** On January 1, 1920, the Babies Dispensary and Hospital of Cleveland at the instance of Dr. Gerstenberger, began a campaign of diphtheria prophylaxis among pre-school children. We used the toxin-antitoxin prepared by Park and Zingher and followed the technic outlined by them. This campaign was independent of similar institutional immunization and independent as well of a corresponding campaign begun in the public schools at about the same time.

It was organized with the already established prophylactic dispensaries for the feeding of well infants as the sites for operation. We drew our children from those already in attendance at these stations. In addition the visiting nurses sent us a great many. And finally a certain amount of publicity in the daily and foreign language papers swelled our numbers in no small degree. Since the beginning of the work about 2,500 children of the pre-school age have been inoculated. The results do not vary essentially from the published results of Dr. Park.

Preliminary Schick tests were not done on these children, but subsequent tests were made at varying intervals after three months. We found the maximum immunity had developed after six months, which also agrees, I believe, very closely with the New York results.

Now this total is distinctly less than the huge number of children treated in New York, and generally speaking conclusions drawn from so small a group will bear criticism.

Yet I feel that we did make a definite contribution from the Cleveland work, since we had occasion recently to recall attention to the varying quality of the Schick toxin. About nine months after the work had begun we did Schicks on a small group of children (about 150) who had been injected with toxin-antitoxin from three to eight months before. Every test was negative. At first we were delighted but later we were doubtful. We felt that something might be wrong. So we used some of the same lot of toxin on a group of non-immunized children at Lakeside Hospital and got only 5 per cent positives, which was far below the average in that age group or any age group.

We got another toxin from a commercial laboratory and checked against a fresh lot of the original toxin. We did this from curiosity. We were amazed to find that we got a variation in positives of about 30 per cent where we should have had almost identical results.

Then we sent both toxins to Dr. Park for titration. He reported that the one was definitely too weak and explained it on the basis of a new lot of alkaline glass which neutralized the toxin.

The other was definitely too strong. On inquiring at the commercial laboratory Dr. Park found that a workman had been transferred from the antitoxin to the toxin department and that in putting up the toxin he had added 30 per cent "for luck" as he had formerly done in the antitoxin department.

In conclusion, I wish merely to say that the Schick test is a delicate reaction. It involves care and accuracy in technic and, quite as important, absolute dependability of the toxin.



Dr. J. R. Harris asked Dr. Park about his technic with the needle in the Schick test—how he sterilized the needle and whether he used iodine. Dr. Harris also recommended that in attempting immunization that the injection be given in the posterior axillary fold, because there swelling does no harm and sensation is at a minimum.

Dr. Park (closing discussion): We find a great help in giving the test to young children to have near at hand for their consumption a big box of hard candies. In fact some of them had enjoyed the experience so thoroughly that we have often found it difficult to prevent their coming back again and getting another test along with the reward.

(In response to questions): In New York we use two methods for sterilizing needles. One is to put the needle after each injection in alcohol and then wipe it off with sterile cotton. We use that in the boroughs of Manhattan and the Bronx. And the other is to boil the needle after use. This method requires the use of about twenty needles. The nurse removes, boils, and puts on the needles while the doctor gives the injections. This later method is more effective as a demonstration of safety; but I have never known of the other method to give any infection. Our nurses get so trained in judging a positive Schick test that when the children come along they paint a blotch of iodine on the arm of each child showing a reaction without waiting for the opinion of the doctor.

## THE RELATION OF NUTRITION TO TEETH

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Nutrition is defined as "the assemblage of processes concerned in the maintenance and repair of the living body, as a whole, or of its constituent parts."

Any consideration of the relation of nutrition to teeth must include a discussion of the dental tissues and constituent inorganic elements, as well as the complicated metabolic, chemical, and cell processes, which are active in maxillary and dental development and maintenance. This paper, which is concerned particularly with the child, deals only with coronal tissues, which are exposed to oral environment; the growth of roots and attachments, and the incidence of subgingival nutrition and disease cannot be considered in so short a time. The subject is advantageously divided into the formative and maintenance stages.

I. The Formative Stage presents two phases:

- a. Prenatal dental development, which begins about the fiftieth day of intrauterine life and closes at birth.
- b. Postnatal dental developments and eruption, which begins at birth and extends through infancy, childhood, and adolescence to age twenty.

II. The Maintenance Stage, which covers the nutrition of all erupted functional teeth, includes the adult period beyond the twentieth year.

### FORMATIVE STAGE

#### The Prenatal Phase

The diet, nutrition, and metabolism of the mother must be seriously considered in this period, for during the last seven months of pregnancy, the occlusal two-thirds of all deciduous teeth, and the occlusal one-third of the first permanent molars, are formed.

The nutritional processes of pregnant women assume even greater importance when it is realized that deciduous teeth are intended to function in the carious surroundings of the child mouth, from approximately the seventh month until the twelfth year, and that the first permanent molars, which erupt at the sixth year, are considered the most important of all teeth.

While normal formation of the foetal maxilla, in various stages, is vital to facial growth, further development of the face and jaws depends upon the normal ultimate completion, eruption, and function of the deciduous teeth and the first permanent molars, which are formed during the prenatal phase.

If later these teeth become deeply carious, permanent teeth erupt into a carious environment, or alveolar abscesses may create oral foci and systemic disease. If they are prematurely lost, the permanent teeth are likely to drift into malocclusion; mastication is impaired throughout life, and gingival disease generally results.

The embryonic follicles, which are transformed into teeth, lie in the maxillary crypts and consist of the enamel organ and dentin germ.

The enamel organ, which determines the type and location of the tooth consists of epithelial cells; these disappear entirely in forming enamel, which is a deposit, in the matrix stroma, of 95 per cent calcium phosphate, carbonate, and fluorid, with magnesium phosphate, the calcium phosphate predominating. The remaining 5 per cent is supposed to be water of crystalization and not organic tissue.

The more highly vitalized dentin is formed by the connective tissue dentin germ; its specialized cells deposit tubular matrix substance about processes which become dentinal fibrils, and constitute the 35 per cent organic portion of dentin, the remaining 65 per cent is composed of the same inorganic elements as enamel, but in varying proportion.

It would appear a comparatively simple procedure to supply these inorganic elements in the diet with the expectation of their final deposition in tooth formation: this is theoretically possible, and has been frequently attempted and has just as frequently failed in practice.

Consideration must be given, not only to a sufficiency of these substances in the diet, but also to their solubility and to the possibility of assimilation, for that which passes into the gastro-intestinal tract by no means arrives in the blood stream.

Diffusibility of all inorganic salts in the blood must be considered and it must be remembered that too rapid elimination, or too long a period of retention may occur. It is evident that only under certain conditions existing in the blood and tissues, are the cells able to utilize all the necessary constituents of bones and teeth.

This availability appears to depend, in teeth, as in bone, to some extent, upon certain intermediary products or calcifying substances, (such as those in cod liver oil) over which endocrines are said to exercise some control, as yet little understood.

Again, provided the local arrival in the germ of these elements, in available or protein combinations, there arises the question of normal function of the tooth forming cells.

A comparative study of the calcium — phosphorus — calcifying factor ratios in the diet of male and female rats, as related to dental nutrition, is in progress at the Johns Hopkins School of Hygiene and Public Health.

From these investigations it is already apparent that the littering rat suffers more than the male if these substances are unbalanced or deficient in otherwise satisfactory diets. Particularly is it true of maxillary bones and teeth, which present much higher percentages of carious and gingival lesions in the littering female than in the male.

It cannot be concluded that nutritional disturbances which affect bone will always damage teeth, for these studies have shown many animals with defective bones, but normal teeth.

If the relation of comparatively simple chemical elements in the diet, such as calcium and phosphorus, to metabolic and cell processes in the construction of bones and teeth is so intricate, how much more complicated must be the metabolism of protein, carbohydrates, and fats, in oral genesis and nutrition.

All teeth arise primarily as primitive cones, and human teeth are combined cones, formed by progressive incremental deposits of dentin and enamel. Early cuspal deposits of dentin are capped and fused by regular deposition of conical layers of enamel and dentin, as indicated by the incremental lines. Dentin is formed by odontoblasts, functioning from without inward, and enamel is deposited by ameloblasts, from within outward. Simultaneous deposits of enamel and dentin are laid down at various intervals and levels, so that it should be possible, in a dental microscopic section, to interpret the quantitative and qualitative record of the inorganic dental elements, and the type of function of the formative cells.

If the teeth are defective, the character of the lesion and period of its occurrence can be approximately determined.

Each tooth crown is an entity which never increases in size. Resorption and repair, which is usual in bone, rarely occurs in teeth; while both have chemical elements in common, pronounced differences in structure have their effect upon interstitial metabolism and nutrition in teeth.

Macroscopic defects, such as reduction in size, dental dystrophy, enamel pits, hypoplasia, and interglobular dentinal spaces result, when the regularity of these synchronized deposits is disturbed by malnutrition or disease.

The teeth of the children of women suffering from lues or thyroid disease are frequently hypoplastic; this condition however is just as rare in the deciduous as it is common in the permanent teeth; which suggests postnatal rather than prenatal causes.

Hutchinson teeth, and enamel pits and grooves result not only from specific syphilitic infection, but also from the exanthemata, as sequelae of measles.

It is said that rickets, the use of defective infant foods, denutrition, and thyo-parathroid disturbance in children will induce hypoplastic teeth.

Prior to the publication of post war studies of malnutrition in the children of Europe, it was assumed that these defects resulted solely from specific infection and cellular lesions in the tooth germ.

While the influence of specific infection cannot be entirely eliminated, unless each case history is known, these voluminous reports confirm the observation that dietary deficiency, nutritional disturbance, and rachitic states, are quite as active factors as specific infection, introducing visibly defective teeth.

Normal development of the maxilla and mandible, and their correct approximation and closure, as indicated by normal occlusion of the teeth, is dependent upon the diet and nutrition of both mother and child. If these be defective or disturbed by disease, malocclusion and facial deformity commonly results. The etiological factors of these conditions, and of the incidence of gingival diseases in children, as related to nutritional deficiencies, might be discussed with profit if time permitted.

### The Postnatal Phase

The postnatal phase begins at birth and extends to the twentieth year. During this time of infancy, childhood, and adolescence, all of the permanent teeth, including the gingival two-thirds of the first molars, and all of the third molars, are formed and erupted, and the deciduous teeth are normally completed, erupted, absorbed, and lost.

While oral embryologists disagree, it can be safely assumed, that in the interval which extends from the first to the eighth years inclusive the crowns of all the permanent teeth, except the third molars, are completed.

It is no exaggeration to say that the future stability of the denture and the part its function will play in the nutrition and health of the individual, are determined in these eight years.

The cells of the tooth germ proceed to progressively construct the best tissue they may from the available materials localized at the time in the tissue; the character of these dental elements be they inorganic, protein, or fats, depends upon an ample supply in the diet, as controlled by assimilative metabolic and eliminative processes in the child; if these are not normal, macroscopic or microscopic dental defects may result.

It is the usual experience of dentists, that while dystrophic pitted teeth retain greater amounts of fermenting food debris, which is supposed to cause dental caries, than fine looking teeth, they decay no more rapidly; and while it is known that such hypoplastic teeth are not uncommon, they form a small percentage indeed of the 25 per cent carious teeth in 85 per cent of school children.

It is evident that other factors than dental hypoplasia must be active as the structural cause of rapid adolescent caries, which often destroys the child's teeth before they can function. Your attention is called to the following facts which explain, in part, this increasing susceptibility. In the study of thousands of microscopic sections of the finest looking permanent teeth, histologists state that it is rare indeed to find enamel free from defective rods, or dentin without interglobular spaces.

Enamel surfaces may appear perfect, yet decalcification, apparently superficial, may progress rapidly and endanger the pulp through these interstices and the reduction of normal interstitial barriers against infection.

It is notable that such defects are rare in dental structures of normal experimental animals, that they are not repaired, except by the dentist and that they occur during the first and eighth years.

This might well be termed the vulnerable dental and experimental dietary period. It is during this time that children are learning to eat, while the parents and oftentimes the doctor, are concerned to find a suitable diet, especially for those whose nutrition is too often further disturbed by the diseases of childhood. It has been shown by McCollum and Simmonds that the American diet which children are encouraged to consume, is deficient in calcium, phosphorus, and the organic bone forming factors; they make the assertion that we are actually feeding children diets which induce rickets. And this is the diet from which children are expected to develop good bones and teeth, while Sherman places the minimal content of calcium in the diet compatible with normal health at 41 per cent.

Autopsy reports by Schmorl show that 96 per cent of the children during this vulnerable period suffer rachitic lesions though comparatively few are definitely rachitic.

It has been established by Howland and Kramer that the phosphate content of the serum of children is higher than in adults, and that it is visibly reduced in rachitic children at this time.

There are various types of tetany and pediatricists generally believe that many minor expressions of the symptom complex, which finally result in convulsions exist, such as laryngospasm and spasmophilia; and these are said to involve an increasing percentage of children. When the normal blood calcium, which Howland and Kramer have determined is ten mmg. to 100 cc. of blood, begins to fall, these serious disturbances arise, until at five mmg. to the 100 cc., convulsions occur.

Shipley and Park, collaborating with McCollum and Simmonds, have said that "Tetany is an expression on the part of the nervous tissues of an insufficiency of the calcium ion; rickets is an expression on the part of the skeleton of distributed relations between the calcium and phosphate ions."

These facts are significant when it is recalled that bones and teeth principally consist of calcium, phosphorus, and protein, which must be correctly combined during this period, if osseous and dental tissues are to be normal.

It is impressive to find the percentages of children suffering from incipient rickets and tetany, all through this interval, closely approxi-

inating the 85 per cent of children suffering 25 per cent dental caries. The lack of calcium, phosphorus and the calcifying factors in the diet, associated with percentages of calcium and phosphorous in the blood falling below normal, and structurally defective teeth, in large percentages of children, are more than coincidental and most suggestive.

If these facts are correlated, they explain the increasing susceptibility of children's teeth to rapid caries and very obviously point to the remedy, which lies in an intelligent application of recently discovered dietary principles, and to the correction of known errors in the diet of both mother and child, that good bones and teeth may be formed.

#### THE MAINTENANCE STAGE

Of the interstitial nutritional processes by which adult teeth and attachments are maintained and resist diseases little is known, but much has been postulated. None of the etiological concepts satisfactorily explain the distintegration of the crown by caries, or the destruction of its attachments by pyorrhea. Proceeding from external causes and surfaces, aciduric bacteria are believed to progressively decalcify enamel and proteolyze dentin, exposing and infecting the pulp and inducing apical abscess.

Gingival disease is said to result externally from traumatizing occlusion, calculus, and infection, while internally, absorption or vascular stasis is thought to involve attaching tissues.

The assertion is often heard that defective diet and malnutritional states cause dental disease by some vague process, the details of which are not stated. That carious and gingival disease which is clinically and microscopically comparable to human dental disease, may be induced in the molars of adult rats by defective and deficient diets, has been shown by the writer in collaboration with McCollum and Simmonds.

No sucrose existed in the diets, which consisted of seeds, casein, steak, powdered whole milk, butter fat or cod liver oil, calcium carbonate, and sodium chlorid, with a satisfactory content of other salts and vitamins, in varying ratios; in fact, that were so constituted as to "make the deficiencies no greater than those common to the American table."

Very slight variations in the ratio of calcium to phosphorus, and of both to the organic calcifying substance in these diets, produces lesions in the molars of experimental rats, while none appeared in the stock controls.



It should be noted that the rat incisors, which contain persistent pulps, grow through life and are subject, like bone, to absorption from within by the vascular pathway; but its molars are completed teeth, which except for size are comparable in structure and numbers to human molars and that defects in such teeth are rarely produced except by external causes.

There can be little doubt that deficiencies in the antiscorbutic substance produce gingival disease in adults, and what is less common, occasionally involve the gingivae of children. This appears to be confirmed by clinical observation and the research of Percy Howe.

It is none the less true that too much emphasis has been placed upon the importance of vitamine deficiency, to the exclusion of basal elements, as the primary etiological factors in oral disease.

Howe produced gingival lesions in guinea pigs, which are susceptible to deficiency in the antiscorbutic factor, by excluding it from the diet; while in the preceding experiments quoted, similar lesions were induced in rats, which synthesize the antiscorbutic factor and do not need it, by disturbing the calcium-phosphorus dietary ratios.

Again, experimental xerophthalmia, which was supposed to result from fat soluble "A" deficiency, has been recently induced in rats by diets rich in fat soluble "A" in which the chlorid content was excessive.

These divergent results cannot be explained; they are cited to illustrate the misconception which might arise from too hasty conclusions in any dietary experiment.

It is not possible at this time to name any one deficiency which specifically causes dental or oral disease; it would appear that any slight variation in the American diet, which always so dangerously approaches the level of dietary deficiency, might become active at any period of lowered resistance or of physical or nervous stress.

But it is also evident that a liberal and correctly balanced intake of all dietary factors, if the essentials can be determined, may prevent these ills by forming good teeth and attachments, by greatly increasing dental resistance, and by maintaining normal salivary secretion and oral environment.

#### DISCUSSION

Dr. B. Franklin Royer, Massachusetts-Halifax Health Commission: I think we should not let this splendid paper go without some commendation and an

expression of appreciation of what it means to have one of the dental profession lay before a group such as we represent the latest information on the subject of dental hygiene.

There have been several key-words running through this convention; striking words have been much used in other conventions. I remember a year or two ago when "cooperation" was the key-word. And every now and then some person has mentioned "cooperation" during our present sessions. But during this convention I have noted that "adaptation" and "background" are words that have been worked a great deal. It happens to be my particular job to do the adapting in a dental program, though lacking entirely the scientific training and the background of the dentist. It has been my job to follow the work of advanced dentistry and try to be first on the ground to adapt into a community health program the things that seem worth while "adapting." I have followed the work, not only of Cross and Howe of Boston, of McCollum and staff of Johns Hopkins, but also of Mrs. Mellanby, Drummond, Hopkins, and others of England, all of their dietary experiments, to see if we might learn what of value there was in them that could be applied profitably in preventive medicine to the diet of the expectant mother, to the diet of the young babe, and to the diet of the pre-school age child.

Working in Halifax, Nova Scotia, where we have an unusually progressive dental profession, we were able to secure early dental approval of a campaign to put on a pre-school age dental clinic, and to limit admission to the pre-school age period. We also planned to give advice to the expectant mother. We do not do the dental work in the mouth of the expectant mother, but we do aim to have the dentist in consultation with the doctors and nurses of the clinic and "hammer home" to that mother the kind of food that she needs if the dental enamelling of the first set of teeth is to be perfect; we try to make that expectant mother or that brother or sister or whoever is with the child when he comes to the clinic from six months to six years, help "hammer home" the first lesson.

We have at the present time a very clever dentist (paedodontist) carrying on a unique experiment, where she has nearly 500 babies coming in four times a year for dental guidance. Her work is in addition to that of the public health nurses visiting in the home and the trained nutrition worker (visiting housekeeper) visiting that home. Observations have been made on some of these children for two years before entering school. The school dentists have called the attention of the School Board to the work voluntarily by letter, stating that this pre-school dental work was beginning to tell in results.



**REPORTS OF FOREIGN AND INSULAR DELEGATES**



## BELGIUM

Mrs. H. W. FARNAM, New Haven (formerly of Belgium)

As I stand before you this evening my heart gives an inward cry of joy and happiness for while to-day as representative of the Belgian Government, I am to tell you briefly of the work Belgium has accomplished in child welfare, I cannot help remembering with what anguish we were pleading with you only a little over four years ago to help save the lives of thousands of our children. The man who was here yesterday saved the lives of millions, and I shall read to you a message which I received from the Belgian Government:

BRUSSELS, October 11th.

To HERBERT HOOVER: Many thousands of little boys and girls send you loving greetings and expression of their gratitude for help given them in the darkest hours of the war by the Commission for Relief in Belgium. This gratitude distance and time will never dim.

HENRI JASPAR,  
*Minister of Foreign Affairs.*

I believe that it is from Belgium that about forty years ago the first cry of distress in favor of child welfare was sent forth and I believe it was in the United States that afterwards the science of child hygiene took the greatest development. I use purposely the word science for child hygiene is really a science, but it is a science that can not be served with one's mind only, but with one's heart at the same time.

About forty years ago a few people of initiative started this movement in favor of child welfare, got the interest of a few learned men of different governments and parliaments and since then this question has become the subject matter of many new laws and has been taught in many universities. In the last twenty years Belgium has learned much from America.

But it is not to tell you how much we admire all that you have done that I am here, but to tell you what little we have tried to accomplish in Belgium. Child welfare can really be divided in two different sections: one dealing with the protection, hygiene and strength of the

child's body, and the other dealing with the protection, hygiene, and strength of the child's mind or moral welfare. We have these two fields of work quite separate in Belgium. The first of them is working under L'Oeuvre Nationale de l'Enfance which was established by law September 5, 1919, and receives an annual grant from the public treasury, a grant which is restricted to the sum set down for that purpose in the budget. It has for its object to encourage child welfare work and to popularize scientific methods in regard to child welfare in families, public, or private educational establishments, charitable and philanthropic work. These funds which the Association may dispose of are those which naturally accrue from gifts, legacies, and other sources and are used for the different following types of institutions: nursing, consultation centers, supervision of children put out to nurse, agencies to provide food for children of tender age, and nursing mothers. Free consultation for all these and expectant mothers in every town or village where twenty of them demand it.

I shall let the other Belgian who is here and who has done a lot in this cause, tell you all about it and I am going to shift to a subject that I have much on my heart, and that is the subject of the International Child Welfare Association. You may not know that in July, 1921, an international convention met in Brussels and a resolution was adopted then by the delegates of all the countries represented that an international association for the promotion of child welfare was to be formed. This association has for its object to serve as a link between all the private persons, private institutions in all countries interested in child welfare. The International Bureau has for its mission the publication of annual reports in different languages, on the child welfare work of every country and every institution doing that type of work. It has also a mission to discover all documents, laws or statutes that have been published in the different countries on these very important questions. Many countries have joined this Association, Belgium, France, Sweden, Switzerland, Italy, Luxemburg, China, and many others. From what I gathered,—for I have been more or less dead to the outside world, having become an American citizen in the last five months, which is no little job—America as a nation is not able to join this Association. I am sorry that this is so, but there is a way to get America in. You know one must always look ahead—if you cannot go straight, you can always find a way to go around and get to the same place. This International Association for the Pro-

motion of Child Welfare in Section 5 says that "All countries which have fifty individual members will form a national section of the International Association and will then be able to have a representative at the Congress which will be held every year in different countries." That's the way for America to get in. Now you already have twenty-four members who are affiliated with the International Association. Only twenty-six more are required. I hope there are twenty-six people here who will join. Belgium has 146 private institutions which have joined; France 210, Switzerland 55. And big America cannot let the other countries beat us. She has to have many more private organizations representing her in the International Association. Anyway, we have one American on the committee, and that is Mrs. Vernon Kellogg, who is a great friend of Belgium, and has been appointed on the committee as a private member.

I am leaving you now, but inasmuch as I brought you a message of love from Belgium in starting, I shall end as an American citizen, and proud to be one, by saying that I hope some day the child will be the worthy and peaceful link between all of us in the whole world.

#### THE WORK OF THE "OEUVRE NATIONALE DE L'ENFANCE"

Miss Delphine Borginon

It is a great pleasure for me to try to give you an idea of what has been realized in Belgium in child welfare work. All the greater because if we now have any right to be proud of the results of our efforts, and if we may look to the future with confidence, we owe it to the powerful aid so generously granted us by the United States during the war, for which Belgium is and will remain deeply grateful.

Before the war we did very little in the way of child welfare. When the war broke out the need suddenly increased through the absence of the fathers fighting at the front, the lack of employment, the scarcity and the high cost of food.

An organization, "The National Committee of Help and Alimentation" sprang up to alleviate the sudden and overwhelming flood of misery and distress. This organization stood under the protection of their excellencies, Marquis de Villalobar, Minister of Spain, and Mr. Brand Whitlock, Minister of the United States, and later also of



Mr. Van Vollenhove, Minister of Holland. To a joint committee of this organization and Commission for Relief of Belgium, organized by Mr. Herbert Hoover, was entrusted the feeding of the civil population of Belgium.

As a result of their efforts, when the Armistice was signed, the country was covered with a network of child relief agencies. Economic conditions were far from normal as yet and it would have been disastrous to the children had help been suppressed at once. The Parliament, in 1919, passed a law by which all the child welfare organizations were financed, and put under the supervision of the "Oeuvre Nationale de l'Enfance"—National Committee for Children. This institution—so its statutes state—is meant to encourage and develop the protection of childhood and to spread the knowledge of scientific child hygiene. It is directed by a Board of 40 members, appointed for the first time by the King himself. In each of our nine provinces there is a committee which acts as immediate supervisor of local child welfare activities and as an intermediary between them and the Central Board.

The following are the various types of organizations under the protection of the National Committee:

First—The infant consultations for children under three years of age. The National Committee has undertaken to establish them in each of our 2,092 communes. To date we have 900 consultations caring for approximately 80,000 children. These consultations have saved thousands of young lives. Infant death rate has lowered from 14.6 in 1913 to 10.3 in 1920, and statistics show that it is far lower among the children attending the consultations than among the nonattending ones. Great progress has been made in regard to the feeding of children (which question was generally poorly understood in Belgium), and also in the education of the women as mothers.

Second—The Gout de Lait or the milk stations. These are generally annexed to the consultations to provide pure milk and controlled products to the children.

Third—Cantine Maternelle. As the milk stations care for the infant so do the mothers' cantines care for the mothers and expectant mothers. For indeed, as one of our first aims is to get the mothers to nurse their babies, we have to help them to become strong and fit for their task by providing them food. There are now 501 of these cantines providing one meal a day to 11,576 nursing mothers and 6,613 expectant

mothers. This phase of the work has not increased during the past year for as the country recovers mothers are more able to get for themselves the food they need.

Fourth — We now come to the creches or day nurseries. They are not numerous, only 29, for it seems that our women have a prejudice against them. They would rather trust their children to some willing neighbor than to a creche, although the creches have the best modern equipment and are well managed.

These then are the ways in which we protect our children under three years. From three they may, and generally do in the poorer classes, go to school. Since last year medical supervision in the schools has become obligatory, but it is as yet far from what we should like it to be.

The cantines established in our schools during the war supplied to all children a good bowl of soup and a large roll. Now, nearly all these cantines have been suppressed. The meals were no longer needed by the children who were properly fed at home and they were insufficient for the others. So the National Committee decided on a new scheme; the still existing school cantines were gradually replaced by the cantines for debilitated children. All the children pointed out by the school doctors as undernourished are admitted to these; also those whose parents are both out at work during the entire day, provided they pay according to their resources. The National Committee supports 82 of these cantines supplying 10,400 meals per day.

Fifth — Colonies for Debilitated Children. Supplementary meals alone will not of course, give to the pale, undernourished child living in crowded quarters of the cities deprived of sun and air, the health which is their right. They need fresh air, the sea, the woods and fields. So the National Committee created for them country and seaside colonies. These have been organized according to modern methods of hygiene and comfort. The children there not only gain in strength but are taught those habits of cleanliness, order and health that help them to become and to continue normal. To avoid a setback in their studies they have regular classes in open air. The lessons are given in a pleasant, easy way so as to avoid intellectual or physical strain. In the beginning the stay of each child was three months and no more. Lately it has been decided that in order to make the sojourn as beneficial as possible the children who have not reached their normal weight shall remain

as long as the doctor considers necessary. In 1921 our colonies sheltered about 8,400 children, making an actual total of 520,000 days passed in the colonies.

Brussels has also a special day colony for the weak child under 7 years of age. Every day, during a two month period for each child, special trains carry them to and from Tervueren. There they enjoy their classes and play in open air and are given three meals. The children are regularly weighed and measured and a doctor is in attendance twice a week.

The National Committee also cares for a group of subnormal children who need only individual care applied with the right methods to become fit for the struggle of life. The home school at Rixensart, where the methods of Dr. Decroly are applied may be considered, I think, as one of the best institutions in the world for such children.

Infant consultations, milk stations, mothers' cantines, creches, cantines and colonies for debilitated children—these are the various institutions governed by the National Committee. The demand for trained workers was great, especially for the visiting nurse. Visiting nurses as such, up to this time did not exist in Belgium. The first course of training for this type of nurse was started in 1919, followed soon by others. To make sure of proper training, the National Committee outlined the course of study and held special examinations for those nurses who wished to work in the child welfare organizations.

Less striking than the institutions that one can see, but perhaps of more importance is the influence exercised by the Central Board on all questions affecting the health of our children, the security of our mothers, and the diffusion of the principles of hygiene. It watches the legislation and frequently intervenes; for example, it submitted suggestions for the creation of intercommunal maternity hospitals for small communes isolated from the towns.

At present, the Board is making a study of the best way to spread the knowledge of motherly duties among girls; the measures to be adopted for raising the percentage of nursing mothers; the means of abolishing the traffic in anticonceptional products and so forth.

It publishes leaflets and health literature which are distributed throughout the country and also a monthly review of the activity of child welfare organizations in Belgium and abroad. A library too has been started last year with a view of helping all those studying ques-

tions concerning infancy. It has now a thousand volumes, 21,000 pamphlets and receives regularly about a hundred reviews from other lands.

Perhaps it will interest you to know how much money is needed to keep up this organization and in what way the expenses are covered. Within the limit of a maximum cost for each particular kind of work, the expenses of each activity are met one-half by the state, one-fourth by the province, one-fourth by the commune. Money is raised also by public subscriptions and generous gifts. The central executive offices and staff are supported by the government. The figures for the last three years are a little indication of the increase of the work. They jumped from an expenditure of 3,000,000 francs in 1919 to nearly 20,000,000 in 1921.

I have explained to you in as few words as possible the achieved work. We realize that quite a lot remains to be done. The centralization of all the child organizations under the National Committee is excellent in so far as it avoids overlapping, but as most of the institutions were born during the war, to meet primarily the needs occasioned by the shortage of food, there remains much to be done to satisfactorily convert them from charitable into educational and preventive agencies.

And now, as you know, the C. R. B. Educational Foundation has brought 15 Belgian teachers to America to study your methods of teaching health in the schoolroom. Five of these teachers come from the staff of the National Committee and we are determined that on our return the National Committee will enlarge the scope of its work from the weak child to the well child and how to keep him well. We have not only to fight infant mortality and poverty but to give to all of our children the chance to become those healthy and vigorous men who are the hope and joy of a nation.

Never can we express enough our gratitude to America. Our existence during the war and our inspiration after comes from you.

## ITALY

Dr. ADOLFO VINCI, Royal Counselor of Emigration.

Mr. Chairman and members of the association: I do not think it is necessary for me to take much of your time after the very eloquent speeches made by the ladies who have preceded me, especially the representative of Belgium, who, with the usual eloquence of Latin France, has given us a ringing inspiration to go forward in this work. We have not a technical delegate present, but I want to express for the Italian Government, the appreciation for the great work which America is doing for the child. A country like Italy, where there is so much love for the children and which understands so thoroughly that education of the child and the health of the child means the happiness of the family, the greatness of the nation, can really thoroughly understand the importance of your work and appreciate it. That is why I am just limiting myself to tell you how the Italian Government representing our people is appreciating your work, and form the best wishes for the greatest result of your work for America and for the world.

## POLAND

Miss HELEN SOLTAN

The Legation of Poland has delegated me to extend heartiest greetings to you in the name of the Polish Government and to express our appreciation of your contributions in the field of child hygiene.

It is a great honor and pleasure for me to have the privilege of speaking before one of the leading associations of America in the field of child welfare, and especially the Association which has for its President, the Honorable Herbert Hoover, whose name is familiar to thousands of Polish children and connected with perhaps the biggest humanitarian act in the history of the world: "The American Campaign For Saving Children's Lives in Europe."

Having a very limited time to present the work done in Poland in the field of child welfare, I will not try to enumerate all the various kinds of activities started or try to give statistics of all the institutions, the number of children cared for, and so forth.

These figures could be very appealing but a great part of them

have still the character of emergency work and might give the impression of a poorly balanced program. The problems created by the war have to be met and are of vital importance, but at the same time the sound organization of constructive, preventive and educational work has to be laid. So what is of interest and what I should like to emphasize here are the principles on which the work is based, as they are the safeguards of the future results.

It would be of interest here to have a glimpse at the present situation and the conditions which brought it. Poland, after being for more than one hundred years not allowed to take care of her own problems and often purposely held back in her progress, had to assume full responsibility for the situation in one day, the day of the disarmament of the German troops on the streets of Warsaw by the civilian population in November, 1918.

The complexities and difficulties of the moment were so overwhelming that they are hard to realize if one did not live through them.

After four years as the principal theatre of war in Eastern Europe with all the ruin and devastation that follow it, Poland had to defend her independence from the very first day, and again more than two years of war followed. At the same time she had the tremendous task of writing a Constitution, of organizing and coordinating the administration and of meeting the most urgent problems, such as the war orphans and the terrific problems of hunger among the refugees in the vast devastated regions of the East.

All the forces and energies had to be directed to this emergency work, so that it is only from the spring of 1921 — when the peace with Russia was signed and when the danger of starvation of thousands was eliminated by the joint action of the American Food Commission and the Polish Central Committee of Care for Children and by the betterment of local agricultural conditions — that the real constructive work could begin.

The basis of our Child Welfare program is found in our Constitution concluded in March, 1921:

According to articles 94 and 103, every child deprived of parental care or neglected has a right to the care and protection of the State.

It is the duty of every citizen to give proper care, training and at least the equivalent of an elementary education to his children. The parental authority may be suspended only through the sentence of the court.

Labor for children under 15 years of age, night work or labor under conditions especially unfavorable for the health of the adolescent workers, is prohibited. The State provides for elementary education and school attendance is compulsory.

In January, 1920, a special act created juvenile courts in the largest cities, the legal authority of which was defined by the Ministry of Justice.

These are the corner-stones of the work; the State has defined its responsibilities towards the child; now it is the duty of the whole nation to see that these principles are further developed and of the leaders to direct these developments along scientific lines, so that the program may be complete, efficient, and bring the best results.

The Polish administrative system is organized on the principle of self government, each district (corresponding to a county in this country) having its own local Diet which, in addition to dealing with administrative and economic problems, has the power of appropriation and control regarding the cultural, social, and sanitary problems. This gives far reaching opportunities to organize and educate the community to a recognition of its needs and to awaken its sense of responsibility, all of which is highly constructive and of greater permanent value than to bring in money and organization from the outside.

The general tendency is to decentralize the initiative but to centralize the supervision.

Yet, at the present time one could occasionally observe the opposite; too much is done by the Government and not enough by local effort, but the answer is very easy: first, the special war problems are still there — this year still 250,000 children were given food, there are still thousands of war orphans in need of care; second, all the efforts of organization and communities are more philanthropic than social, all the energy is turned to the child caring institutions; the public must be educated along the modern line of preventive work and you know well how long it takes to educate a nation if even in America after 18, 15, 13 years of intensive work and generous budgets we hear at this meeting appeals "To educate the educators, to educate physicians, to educate the public."

The Ministry of Public Health, which has created a special department for the care of mothers and children, has done splendid work and has shown a broad vision and a real understanding of the problem.

It has created special commissions Hygiene-Medical to advise and stimulate the efforts of the local self governments, trains public hygienists who help in the district work, conducting child health centers and dispensaries, advising and educating mothers, all under the direction of the State district physician.

Appreciating the value of a thorough knowledge of local problems, a study was made of the infant mortality rate, the opportunities available, for mothers as to prenatal and confinement care, of the hygiene in elementary schools and child caring institutions and others, popular pamphlets and leaflets are published and distributed.

To meet special problems the Ministry has created special Commissions or Councils such as the Council of Physical Culture and Education. The study made of children showed an appallingly high per cent of tuberculosis among them, and resulted in the Commission of Summer Colonies or as you call them Fresh Air Camps.

With the aid of private agencies there were 178 camps organized last summer with 20 additional of a special curative character mostly for tuberculous children. I would not like you to have the impression that the Government is alone in its efforts. There are some splendid organizations cooperating, such as the Hygiene Association of Warsaw, the Teachers' Association, Orphans' Nest Society, Summer Colonies Association, but as I said, the whole public has to be educated. They understand the problems and the necessity of intervention, but not to the extent of making the very serious sacrifices that the raising of adequate funds would demand, due to our present difficult economic conditions.

I want, if time permits, to say something more about one of the above mentioned societies, "The Orphans' Nest," as it is peculiarly Polish with no exact counterpart in any other country.

Founded in 1908 by a private citizen, M. Jezewski, for the care of orphans, it combines the placing out system with the cottage plan. The main features of its policy are:

The organization secures a farm on which it places a carefully selected married couple, preferably with children of their own and completes the family with orphans of different ages and sex to the number of 15. The children stay in their foster home until the age of 16, living a normal family life of study, work, and play; with normal responsibilities, joys, sorrows and the pleasant variety which can not be obtained in any institution, even the best. The income from the farm



has to cover the family expenses; the profit being divided among the whole group, half to the foster parents and the remainder among the children according to their age and ability to help. This is banked for the children as their savings account.

I need not say that the progress of the little family is followed very closely by the Society, ready to help in the solution of any problem and to interfere in the case of abuse. Only morally, mentally, and physically normal children are admitted. If a child shows any serious undesirable tendency, it is removed.

At the age of 16, the boys and girls choose their future careers and are given a sound vocational training. During this time they are under the direct care of the Society, but always remain in close contact with their homes where they often return to spend their vacations or to have a rest. The especially bright are given opportunities for higher education and so at present there are 4 of the pupils following different University courses, one preparing for the priesthood.

As the work of the Society endured special hardships during the war the practical and financial results can not be discussed yet, but the moral results proved to be splendid. The type of young men and women brought up by the Society is one of high moral standards and ideals, well prepared for life, with initiative, knowing their social duties as citizens in contrast with the disoriented and colorless type turned out by most institutions. The value of this work is proved also by the great interest aroused in the public and by the serious help and cooperation given by the Government.

In conclusion, the Child Welfare Program in Poland is not yet complete nor can it yet show magnificent results; it is too young; but with our legal and administrative background and the high ideal of service so strongly developed among us towards our country, we hope soon to be proud of our achievements.

## COLOMBIA, SOUTH AMERICA

Madame MARIA SUAREZ DE CORONADO

Permit me to thank you very much in my own name and in the name of my country for the spontaneous and kind invitation extended to me to take part in the discussion of matters pertaining to maternity and child welfare, subjects in which the world as a whole is so deeply interested at the present time.

Nothing gives me more pleasure than to sit among such a distinguished assembly and be able to hear from the eloquent speakers selected for this memorable occasion the report of the marvelous advancements made in this great land of Washington and Lincoln toward the protection of children and to other subjects of child welfare in general. This information will be very valuable to and greatly appreciated in Colombia and I shall be very pleased and honored to forward to my country a complete report of the activities and accomplishments of your important organization, so all my countrymen and countrywomen can benefit themselves from your able and useful advice and contribute to spread all over the country the fertile seed derived of such an altruistic movement as this.

The care of children has always been looked upon with special attention in Colombia and considered one of the essential necessities for the prosperity of the country. In the principal cities of the different Departments Day Nurseries, Milk Stations, and Free Clinics have been established by both the Government and private charitable institutions, and the results obtained so far have been very gratifying. The first public health station of the Colombian Red Cross has recently been opened in Bogota. At this station women are instructed in the proper care of their children, who are weighed so that their mothers will know what progress is being made. Patients are vaccinated against smallpox and other infectious diseases, and many other services of great benefit to the public in general are rendered free of charge. The Government of Colombia has recognized the National Red Cross as an auxiliary of the sanitary service of the Army under the Ministry of War, and consequently the Colombian Red Cross that is contributing so wonderfully to the welfare of children, can now become incorporated in the International League of Red Cross Societies. Under the name of *Cajas Escolares* there was founded in Bogota several years ago a charitable institution for the protection of poor children who attend the public schools and whose parents are not able to support them. The institution provides breakfast for all of these children and maintains in every school a restaurant where free meals are given daily. It also supplies the children with necessary clothing and is planning to open summer camps where children can have a vacation in the open air. Another good movement which is receiving careful consideration in Colombia is the establishment of playgrounds for children, and the different municipal assemblies are legislating towards this end. In certain sections of the

country, especially in the warm climates, there prevail among poor children the malaria and hookworm diseases which cause a great deal of infant mortality. In order to stop the spread of these diseases the Minister of Agriculture and the Public Health Service secured the cooperation of the Rockefeller Institute. The treatment for these ailments is under the care of an Institute Official and Colombian assistants, while the Government is in charge of the sanitation of the soil. The *Revista de Higiene* of July 18, 1921, shows that the campaign was at that time under way in the Departments of Antioquia, Norte de Santander, Cundinamarca and Boyacá. Those conducting the campaign gave from July, 1920, to July, 1921, a total of 38,068 lectures to audiences aggregating 258,298 persons, for the purpose of instructing the people in the prophylaxis of these diseases. They also distributed 136,242 pamphlets, inspected 73,300 houses, caused 37,210 toilets to be built and gave 37,060 treatments. Dr. V. A. Heisser of the Rockefeller Foundation, states that in none of the countries where campaigns have been conducted against hookworm has so much work been done in the same length of time.

I have outlined briefly some of the activities that are taking place in Colombia for the betterment of future generations, and although there are still a few more and the country is thoroughly awakened to the necessity of taking good care of its children, nevertheless much remains to be done. I am sure that with meetings like this much good can be accomplished, and we delegates of your sister Republics of the South can learn, through your good assistance and exceptional experience, many useful lessons which we shall be glad to transmit to our peoples and give them the opportunity to benefit themselves from such good and very much appreciated work. It is of the utmost importance that through meetings, such as these, the nations of America be made to see and appreciate the fact that the economic, social and educational problems, as Dr. Rowe, Director of the Pan American Union said once, have much in common, and that through cooperation, mutual helpfulness and interchange of experience, these problems can be most effectively carried towards successful solution.

## MEXICO

Mrs. M. G. CONDE DE AVILA

It seems incredible that for so long any kind of crop, fruit or flower should have had more care and preparation to be brought to life and developed than the human being, the most precious product on earth. But this transcendental neglect is now beginning to be avoided. As a matter of fact, the father and mother-to-be are in greater numbers taking more and more into consideration the principles of eugenics, thus giving birth to children who will, in turn if properly reared, improve their lineage. This is how we may count upon a betterment of the race after two or three generations.

It is a great satisfaction for me to tell you that in my country, Mexico, although far behind you, we are following, especially in what regards child hygiene, the most modern methods by which science is saving a higher percentage of lives every day and making the world healthier and happier. We have to admit that we would need to do much more than we are doing at present in Mexico; but if you stop to consider with me for a moment the seriousness of the big problems that lay before us and the many obstacles we are bound to overcome, you will certainly realize the worthiness of the effort to attain even those limited results. The racial problem in my country is one of the most important, as you all know; unfortunately, to solve it is not an immediate nor easy task; its solution requires not only time, but also the solving of other concomitant problems, of which the economic is paramount. What could be expected, living as we have lived for so many years in anxiety and poverty amidst our undeveloped wonderful resources?

According to the Board of Health Bulletin of the City of Mexico, during the twenty years previous to 1920 the mortality rate of children up to two years of age caused by gastro-enteritis only was from 21 to 34 per cent in relation to the total mortality rate. This is a dreadful figure if compared with statistics of other countries, especially the United States. Nevertheless, we are now slowly, but steadily, doing something

worth while in the home, as well as in the many public and private institutions we have for child welfare. The well known institution "The Drop of Milk," devoted to fighting the evil at its source, is an important factor to be reckoned with in the changing of conditions which is taking place to save so many tender lives.

A decisive step towards coordinating the scattered efforts of scientists and of men and women of good will in this vital matter was the convening of the so-called First Mexican Child Congress in Mexico City two years ago, which by the way was originated with the valuable help of Dr. Ellen Palmer of Harrisburg, one of your great women whom I have the pleasure of seeing among us this evening.

At that meeting, held under the auspices of one of the leading Mexican newspapers, *El Universal*, eighty-six studies were presented, and afterwards compiled and published, twenty-four of which deal with child hygiene. Among the most interesting allow me to mention only, for the sake of brevity, these:

Maternal Psychic Influences on the Child During the Gestation Period by Miss Esperanza Velasquez Bringas;

How the Maternity House Should Be to Duly Fulfill Its Object by Miss Catalina d'Erzell;

Vaccination and Re-Vaccination by Dr. Sarah Zenil;

Improvement of Kindergartens by Professor Maria Martinez;

The Creation of School Farms All Over the Country by Mrs. Catalina Farias de Isassi;

Instructions on Puericulture for Mothers by Dr. Antonia L. de Ursua;

Study on Juvenile Courts by Mrs. Maria A. Sandoval de Zarco, our first woman lawyer;

The Eugenic Problem and the Future of Mexico by Dr. Antonio F. Alonso;

The Way to Have Children Contract Habits of Hygiene by Dr. Alfonso Pruneda;

The Importance of Puericulture as a Prophylactic Factor in Gastro-Intestinal Diseases by Carlos Jimenez;

Popular Instructions Against Diphtheria by Dr. Miguel Casanet y Gea;

Conclusions on Legislation for the Establishment of Juvenile Courts by Lic. Antonio Ramos Pedrueza.

Many of the resolutions adopted in that eventful meeting are being carried out and it is to be hoped that my country will attain in the near future the wonderful results you have already accomplished in this worthy campaign to preserve that great treasure of a healthy childhood by having child hygiene as the keystone of the social structure.

## PHILIPPINE ISLANDS

Miss SOCONO SALAMANCA

Child welfare work is not new in the Philippines. As far as can be traced, it started in the year 1880 when rice was first imported from Saigon, China. A Filipino physician, working on his own initiative, took up the study of a pseudo-epidemic then raging in the Islands. The studies he made brought out the fact that the epidemic resembled one of our most common diseases in early infancy called "infantile beri-beri." Since then the disease began to develop its symptoms in the adults which later reacted as a destructive influence on our infants under one year of age.

This problem occupied the minds of our physicians a great deal and so at their suggestion in 1886, the Honorable Ayuntamiento of Manila held a contest to stimulate the study of this disease. In October, 1904, Dr. Maunel S. Guerrero identified the disease with what is now commonly known as "infantile beri-beri," a fact which disclosed the best solution for its control.

The National League for the Protection of Early Infancy was organized in 1913 by a number of prominent Filipino physicians. A child welfare center was established first and later a milk station. The first president was Mrs. Jaycue C. de Veyra.

To make further investigations of the high infant mortality rate due to beri-beri, the Government created in 1912 a Committee on Infant Mortality. In 1914, when the research work disclosed that the disease is due to lack of vitamins in the mother's diet (especially highly polished rice), the treatment by "tiki-tiki" extract or rice bran was instituted. Since it is the most efficacious remedy, the Government provided for its wide distribution free of charge.

For the purpose of making a more intensive campaign, the Philippine Legislature in 1916 appropriated the sum of one million pesos for infant welfare work to be administered by the Public Welfare Com-

missioner directly or by subsidiary private organizations undertaking similar work.

In the year 1919 Dr. Jose Fabella, then Public Welfare Commissioner, was sent to this country and Europe to study the maternity and child welfare programs and his return marked a period of a complete, intensive, and wide campaign in maternity and child welfare work in the Philippines. The few old child welfare centers then existing were reorganized and many new ones were established, and also maternity homes and prenatal clinics. Through his efforts is due the successful organization of the First National Conference on Infant Mortality and Public Welfare held in the Philippines in December, 1921.

## **REPORTS**

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**THIRTEENTH ANNUAL MEETING  
OF THE  
AMERICAN CHILD HYGIENE ASSOCIATION**

The Thirteenth Annual Meeting of the Association was held in Washington, D. C., October 12-14, 1922, under the presidency of Mr. Herbert Hoover. The annual meeting of the Executive Committee was held Thursday morning, October 12. The Directors met in annual session also on Thursday, October 12. The business meeting of the Association for the presentation of reports and election of directors took place Friday evening, October 13. The organization meetings of the incoming Board of Directors and Executive Committee were held on Saturday morning, October 14.

**Registration and Meeting Places**

Through the courtesy of the National League of Women Voters, space for registration of delegates and visitors was provided in the same building as Headquarters, at 17th and F Streets. The general sessions were held at Continental Memorial Hall. The session on Nursing and Social Work was held at the National Headquarters of the American Red Cross and the Medical Session at the Auditorium of the Medical Society of the District of Columbia, followed by a visit to the Children's Hospital.

**Exhibits and Clinics**

Delegates and visitors to the Conference were invited to view original texts on the nursing care of the child and diseases of children, in the Surgeon General's Library at the Army Medical Museum and also to visit exhibits arranged by the Department of Agriculture—Division of Home Economics, Department of the Interior—Bureau of Education, Department of Labor—Children's Bureau, and the Treasury Department—United States Public Health Service. Visits were also made to the Health Center at Arlington, Va.

There was an exhibit of the latest books on Child Welfare in the library of the Association at Headquarters, where also Dr. Frances Sage Bradley exhibited a series of interesting posters made by the school children of Arkansas.

**Hospitality**

Very cordial hospitality was extended by Miss Grace Abbott, who entertained the members of the Association and their friends at tea at the Federal Children's Bureau on Thursday afternoon. There was a delightful informal gathering for the delegates at the Corcoran Gallery of Art on Friday afternoon and a tea by the ladies of the Board of the Children's Hospital, following a demonstration on Saturday afternoon of the Cubicle system of isolation.

**Sessions**

The program was arranged by the Committee of which Dr. Richard M. Smith was Chairman under the following headings:

- The Training in Nutrition needed for Child Hygiene Workers
- The Pre-School Child
- The Administration of Private Child Hygiene Organizations
- State and City Divisions of Child Hygiene
- Nursing and Social Work
- Maternal Welfare
- Medical session

The general order of the Program was as follows:

Thursday, October 12:

- 8:00 A. M. Executive Committee Meeting.
- 9:00 A. M. General Session: The Training in Nutrition Needed for Child Hygiene Workers, Miss Alice Blood, Ph.D., Boston, presiding.
- 12:15 P. M. Annual Meeting of the Board of Directors.
- 2:00 P. M. General Session: The Pre-School Child, Dr. Lawrence T. Royster, Norfolk, presiding.
- 5:00 P. M. Tea.
- 8:30 P. M. Public Meeting, Mr. Herbert Hoover, presiding.

Friday, October 13:

- 10:00 A. M. General Session: The Administration of Private Child Hygiene Organizations, Mr. Homer Folks, New York City, presiding.
- 10:00 A. M. Special Session for Directors of State and City Divisions of Child Hygiene, Dr. Merrill E. Champion, Boston, presiding.
- 2:00 P. M. General Session: Nursing and Social Work, Miss Margaret K. Stack, R. N., Hartford, presiding.
- 4:00 P. M. Informal Gathering.
- 8:30 P. M. Annual Business Meeting of the Association, Miss Mary Arnold, New York City, 2d Vice-President, presiding.

Saturday, October 14:

- 10:00 A. M. General Session: Maternal Welfare, Dr. Prentiss Willson, Washington, presiding.
- 12:15 P. M. Meeting of Incoming Board of Directors.
- 12:30 P. M. Organization Meeting of the New Executive Committee.
- 2:00 P. M. Medical Session, Dr. Frank Leech, Washington, presiding.
- 4:00 P. M. Visit to Children's Hospital.

### Office and Field Work

The office and field work of the Association for the past year are presented fully in the reports of the General Director and Field Director and the report upon *Mother and Child*.

Consolidation with the Child Health Organization of America.

At the business meeting on Friday evening, October 13, Mr. Homer Folks, as Chairman of the Committee on the proposed Consolidation of the Association and the Child Health Organization, presented the following resolutions to the Association:

WHEREAS, It has become more and more evident that duplication of effort and overlapping of activities have interfered with the success of the program for the health of infancy and childhood, and

WHEREAS, The Child Health Organization of America, at a meeting of its Trustees, held May 22, 1922, approved of the proposal to consolidate with the American Child Hygiene Association, and

WHEREAS, The Board of Directors of the American Child Hygiene Association, at a special meeting, held June 30, 1922, similarly approved of such consolidation and appointed a committee to confer with the Child Health Organization of America and report the matter to the Association for action.

Therefore, be it *Resolved*:

I. That the American Child Hygiene Association agrees to consolidate with the Child Health Organization of America to form a new organization, provided both organizations agree to the following:

A. That the full control of the policies and activities of the new organization shall be in the hands of a Board of Directors or Trustees elected by the general membership of the Association.

- B. That there shall be one General Executive, who shall be responsible to the Board of Directors or Trustees and shall have charge of the administration of the new organization.
- C. That there shall be appointed by the new Board, when formed, a committee which shall be directed to work out the organization of the staff of the new organization in such a way as to continue the objects of the two consolidating organizations, without necessarily adhering to the present organization lines.

II. That the President shall appoint from the Board of Directors a Committee to prepare, with a similar committee of the Child Health Organization of America, a constitution for the new organization, which committee shall have power to accept this constitution in the name of the American Child Hygiene Association and to appoint such officers, Boards and Committees as may be called for in the Constitution, to serve until their successors shall be chosen as shall be provided for in the Constitution, subject to the approval of the Board of Directors of the American Child Hygiene Association.

III. That if and when said consolidation is completed the board of Directors of the American Child Hygiene Association shall have full power and authority to petition the Supreme Court of the District of Columbia to dissolve its incorporation and take any steps necessary to effect such dissolution should it deem it wise that this incorporated Association should be dissolved.

IV. That the new organization shall begin its activities January 1, 1923, or as soon thereafter as is possible.

V. That the President be, and hereby is, authorized to take, in the name of the Association, any legal action which may be necessary to effect this consolidation.

Upon unanimous vote of the Association the resolutions were adopted.

At the same meeting, Dr. Wall, Chairman of the Committee on Nominations, submitted for Honorary membership in the Association the name of Miss Julia C. Lathrop. Upon motion duly put and seconded, Miss Lathrop was unanimously elected.

#### Committees

On motion duly seconded and carried the following committees were appointed at the Annual Meeting of the Board of Directors, Dr. Livingston Farrand, President-Elect presiding.

- Nominations: Dr. Joseph S. Wall, Washington, Chairman  
Dr. Merrill E. Champion, Boston  
Miss Mary Arnold.
- Budget: Dr. S. McC. Hamill, Philadelphia, Chairman.
- Resolutions: Dr. J. H. Mason Knox, Jr., Baltimore, Chairman.  
Dr. Ada E. Schweitzer, Indianapolis  
Dr. Taliaferro Clark, Washington
- Amalgamation: Mr. Homer Folks, Chairman  
Dr. Philip Van Ingen, Secretary  
Mr. Bailey B. Burritt  
Dr. S. McC. Hamill  
Hon. Herbert Hoover.

#### ALTERNATES

Dr. Livingston Farrand  
Dr. Richard Smith

The following Directors whose terms had expired were re-elected for a period of five years:

Dr. Alan Brown, Toronto  
 Dr. Merrill E. Champion, Boston  
 Dr. H. J. Gerstenberger, Cleveland  
 Dr. Clifford Grulee, Chicago  
 Dr. S. McC. Hamill, Philadelphia  
 Dr. J. H. Mason Knox, Jr., Baltimore  
 Dr. Lawrence T. Royster, Norfolk  
 Dr. Anna E. Rude, Washington  
 Dr. H. L. K. Shaw, Albany  
 Miss Margaret K. Stack, R. N., Hartford  
 Dr. Philip Van Ingen, New York  
 Dr. Joseph S. Wall, Washington

The following new Directors were elected for the periods indicated:

**Five years**

Dr. Mary E. Brydon, Richmond  
 Miss Mary Gardner, Providence  
 Dr. Arnold Gesell, New Haven  
 Mr. Horace Morison, Boston  
 Mr. Corcoran Thom, Washington

**Four Years**

Mr. Bailey B. Burritt, New York City (to fill vacancy left by resignation of Mr. Courtenay Dinwiddie).

**Three Years**

Dr. Charles E. Ziegler, Pittsburgh (to fill vacancy left by resignation of Dr. J. Whitridge Williams)

Upon recommendation of Dr. Livingston Farrand, the Committee on Nominations submitted for re-election the officers, Executive Committee and Editorial Board for *Mother and Child*.

**Officers for 1922-1923**

Hon. Herbert Hoover, President  
 Dr. Fred L. Adair, 1st Vice-President  
 Miss Mary Arnold, 2d Vice-President  
 Mr. Corcoran Thom, Treasurer  
 Dr. Richard M. Smith, Secretary

**Executive Committee**

Dr. Fred L. Adair, Minneapolis  
 Miss Mary Arnold, New York City  
 Dr. Livingston Farrand, Ithaca  
 Dr. John A. Foote, Washington  
 Dr. Clifford Grulee, Chicago  
 Dr. S. McC. Hamill, Philadelphia  
 Mr. Herbert Hoover, Washington  
 Dr. William Palmer Lucas, San Francisco  
 Miss Winifred Rand, Boston  
 Dr. Anna E. Rude, Washington  
 Dr. Henry L. K. Shaw, Albany  
 Dr. Richard M. Smith, Boston  
 Dr. Philip Van Ingen, New York City

*Editorial Board, Mother and Child*

Dr. John A. Foote, Chairman  
Dr. R. L. DeNormandie  
Dr. H. F. Helmholtz  
Dr. H. J. Gerstenberger  
Miss Sara B. Place, R. N.  
Dr. Anna E. Rude  
Dr. H. L. K. Shaw

An attractive feature of the evening meeting, Friday, October 13, was the three-minute talks by the following delegates from foreign countries, who gave interesting side-lights on child welfare in their own countries:

Mrs. H. B. Farnum of New Haven, Connecticut, formerly Mlle. Susanne Silvercruys, representing the Belgian Government;

Mlle. Delphine Borginon of Belgium, who spoke on that country and the work of L'Oeuvre Nationale de l'Enfance;

Dr. Adolfo Vinci, representing Italy;

Miss Helen Soltan of Washington, D. C., representing Poland;

Mme. Maria Suarez De Coronado, representing Colombia, South America;

Senora Conde de Avila of New York City, representing Mexico;

Miss Soconno Salamanca, representing the Philippine Islands.

**Resolutions**

The following Resolutions were reported by the Committee and were unanimously adopted by the Association:

On May 1, 1922, Miss Gertrude B. Knipp retired as Executive Secretary of the American Child Hygiene Association. Because of reasons beyond her control she was unable to transfer her residence to Washington when it was decided to move the offices to the National Capital. The Directors at the Thirteenth Annual Meeting of the Association, and the first one held without her guiding hand, wish to place on record their sense of the great obligation the Association is under to the quiet, untiring and devoted services rendered to it by its Executive Secretary, from its foundation.

For more than twelve years the promotion of the interests of the Association had been her single aim. To this purpose she gave almost too unsparingly her time and energy. Many of the Directors know with what patience and courage she met and overcame difficulties and with what joy she watched the growth and progress of our organization. Never for a moment did she doubt its ultimate success. The unusual loyalty of our Board of Directors, many of whom only occasionally can attend the meetings, is in no small measure due to the skill with which Miss Knipp aroused and fostered their interest. She sought out and made use of every possible contribution each could offer to the common good. The steady increase in the number of our Affiliated Societies is directly due to her tactful suggestions. We all can be witness to the painstaking accuracy she exercised in responding to inquiries, in conducting her voluminous correspondence, and in the preparation of her reports and the published proceedings of our meetings. Because of its sense of peculiar indebtedness to Miss Knipp for her signal services the Directors propose to the Association the following Resolutions:

WHEREAS, Since the last Annual Meeting it has been necessary for Miss Gertrude B. Knipp to discontinue her valued services to the American Hygiene Association,

Be it *Resolved*, That the Association express to Miss Knipp its sincere gratitude for the remarkable devotion and skill with which she has conducted the office of Executive Secretary during the formative critical period of the Association's life, and further

Be it *Resolved*, That the Association hears of her withdrawal with great regret and wishes her many years of health, happiness and usefulness in any field she enters upon in the future, and finally

Be it *Resolved*, That this preamble and Resolution be entered upon the minutes of the Association and that a copy be forwarded to Miss Knipp.

WHEREAS, Mr. Austin McLanahan has occupied the office of Treasurer of the American Child Hygiene Association since its formation more than twelve years ago, and

WHEREAS, He has always given to the affairs of the Association a generous measure of his time and technical ability in advising on its business policies, and

WHEREAS, He has been obliged to withdraw as Treasurer because of the removal of the office from Baltimore;

Be it *Resolved*, That the Association express its indebtedness to Mr. McLanahan for his guidance and advice during its formative and developing period, which contributed largely to the Association's reputation for sound management and integrity.

The following resolutions were reported favorably by the Committee and were unanimously adopted by the Association:

*Resolved*, That this Association express its thanks to the Committees, Chairmen and Speakers, who have done so much to make our program a success;

To President Harding for his expression of interest and good wishes;

To the Commissioner of the District of Columbia;

To Mr. Gilbert Grosvenor and his associates of the Committee on Local Arrangements;

To Mrs. G. Wallace W. Hanger, Chairman of the Building and Grounds Committee of Memorial Continental Hall;

To the District of Columbia Medical Society and the American Red Cross for the use of their auditoriums;

To the National League of Women Voters for their most helpful cooperation in granting us the use of their rooms;

To Mr. C. Powell Minnigerode, Director of the Corcoran Gallery of Arts;

To Miss Grace Abbott of the Federal Children's Bureau;

To the Children's Hospital and its Board of Women visitors;

To Dr. Clark and Dr. Lumsden for making it possible for our members to visit the Health Center at Arlington;

To the Departments of Agriculture, Interior, Treasury, and the Surgeon General's office of the War Department for their interesting exhibits;

To the Junior League for their kind cooperation and assistance;

To Mr. D. P. Aub, for his untiring energy and help in taking care of the hotel and railroad accommodations and furnishing information for our guests;

To the Press of Washington for their helpful cooperation in reporting the sessions of our Meeting;

And to all those who by their friendliness and hospitality have made our stay in Washington a pleasure.

Thirty-one States, the District of Columbia, Philippine Islands, Canada, Panama, Belgium, India and Mexico were represented in the registration.

## REPORT OF THE GENERAL DIRECTOR

### Summary of the Work of the American Child Hygiene Association

#### Fiscal Year, 1921-22

This is the third Annual Report your General Director has been privileged to present to our Association. In his first report he had occasion to record the remarkable expansion of the Association from 917 members in 1919 to 1,232 in 1920, with total expenditures of \$35,479.70 during 1920 as against \$8,323.39 the previous year. There was not only a marked increase in members and financial support but also considerable growth of activities carried on by the Association. The office personnel was increased to meet the greater volume of work. During this first year our monthly magazine, *Mother and Child*, was born. A field service was initiated and carried out extensively over a large part of the country by the Field Director and General Director. The former spent most of her time in the field and the latter about 70 per cent of his time in conferences with health officers, nurses, social workers, educators, etc. He also gave a number of informal talks and lectures. Points of contact were established between our Association and a large number of other national organizations doing some phase of child welfare. Cordial relations were maintained with all government bureaus dealing with child hygiene. Active interest and support were given to the establishment of the National Child Health Council. The impetus to the year's developments was largely given by a broad program outlined by Dr. S. Josephine Baker, President of our Association for 1919, and was made possible by a generous donation of \$20,000 from the American Red Cross and the untiring efforts of the Chairman and members of the Executive Committee. A whole-hearted response and loyal service were given by the office staff in launching upon the enlarged program.

The next year it was not possible to show such a notable expansion, although there was substantial growth in membership and financial resources. Total membership at the end of the fiscal year 1921 was 2,232, including 273 affiliated societies. The disbursements during that year were \$49,879.29. The fact that this was a reactionary year made it impossible to realize from the membership campaign all we had



planned. There was, however, a considerable growth in the volume of work turned out from the office in Baltimore, in the extension of our field service, in improvements in the magazine, and in the help we were able to render our affiliated societies. Approximately 90,000 pieces of mail went out from the office during that year. No small amount of success was due to the growing importance of our magazine and to the zeal with which our field service was carried out from the Atlantic to the Pacific. Cooperative endeavors with other associations and the valuable assistance of the National Child Health Council made our own efforts more effective and tangible.

### MEMBERSHIP

The year just closing has not been marked by any spectacular performance. We have had a small but steady gain in membership, taking in 412 new members during the year. To offset this we have had to prune our membership list of those who expressed a desire to be dropped from our membership, this amounted to 343 persons. Of the latter the greater number were those taken in during the sporadic membership campaigns in cities where our Annual Meetings have been held. During the fiscal year 1922 we carried 2,301 members on our membership rolls. On September 30, 1922, we withdrew from our membership list members whose dues for the fiscal year had not been paid. There are 43 members who are in arrears several months, a considerable number of whom we may expect to pay up before the end of the calendar year. As it is not desirable to drop these members without further efforts, we may legitimately hold them some time. Adding these to the other members we have a total actual and potential membership of 2,047. Of this number 324 are affiliated societies, and 69 library members. From the facts mentioned above and other considerations, it seems wise to recommend that the fiscal year of the Association be changed to the first of the calendar year and that the budget presented for adoption at this meeting be considered as covering the period from the first of October, 1922, to the first of January, 1923.

### FINANCES

The total amount of money taken in during the fiscal year just closed was \$62,468.34, plus a small balance from 1921 which gave total receipts of \$62,688.40. Of this amount \$12,796.21 was derived from

memberships; \$47,270.66 from contributions; and \$2,401.50 from other sources, such as sale of literature, rental of posters, and rebates on traveling expenses. The latter in the case of the General Director amounted to \$344.15. The total expenditures during the year were \$60,733.58 leaving a balance in the bank October 1, 1922, of \$1,882.51 and petty cash amounting to \$72.31, making a total balance of \$1,954.32. When it is considered that we began this year with a deficit of \$4,318.55 and had increased expenditures incidental to setting up our headquarters at Washington, the present financial status of our Association is exceptionally good and indicates a healthy condition.

The past year has witnessed a widespread interest on the part of directors in the Association, not only in the activities carried out, but also in securing members and larger financial support. Our directors have been personally responsible for adding \$8,885 to our financial resources for the year; this and a handsome donation from our President helped to make possible the carrying out of our activities as planned. This interest on the part of our directors is very encouraging. Every member of the Executive Committee has taken a direct and personal interest in the work of the Association. Three Executive Committee meetings have been held during the year in Mr. Hoover's office. His office has extended us every courtesy and given us much assistance. It has been very valuable to have Mr. Hoover's advice on the developments of policy which have taken place during the past year. Upon the Chairman of the Executive Committee has fallen a great deal of work. Every member should know how much we are indebted to the Chairman of that Committee for his tireless efforts with attention to many details for the welfare of our Association.

#### REMOVAL OF HEADQUARTERS

It may be fairly said that the removal of our headquarters to Washington has already been fully justified. With our establishment on neutral ground in the Nation's Capital, it has been possible to keep in daily touch with the Government departments carrying on maternity and child welfare work and to strengthen our cooperation with other national organizations, such as the American Red Cross, League of Women Voters, Congress of Mothers and Parent-Teacher Association, National Educational Association, the Pan-American Union, Federation of Women's Clubs, and others. The activities of the Association

have become known throughout the entire country through the channels of publicity which we have been able to obtain in Washington, there being more correspondents of representative newspapers in Washington than in any other one city. We have also received substantial advice from the editors and publicity department of the National Geographic Magazine. Scarcely a day passes without some persons actively interested in child hygiene visiting our headquarters. The demands for information and advice have taxed our staff to the uttermost. Over 107,000 pieces of mail went out from the offices during the past year, over 12,000 of which were personal letters in response to inquiries from all parts of this country and abroad. The detailed report of the office work prepared by the Office Secretary is appended to this report.

#### ACTIVITIES

The program of the Association as outlined at the New Haven meeting last year has been carried out in full with the one exception of the development of a publicity department, which we very much need at the present time. A beginning has been made in publicity by having a young man connected with *The Washington Star* handle our publicity for this annual meeting.

What we need, however, is a full-time person to develop an educational publicity department. The transactions of the New Haven meeting appeared early this year, thanks to the devotion of Miss Knipp who saw them through the press and to the Lyon Company of Albany who gave them special attention. The Annual Statistical Report on Infant Mortality for 1921 prepared by Dr. Van Ingen was sent out in June. The magazine has appeared regularly on the first of each month, 50,000 copies having been sent out during the year. *Mother and Child* has grown in interest and in the importance of articles presented. Our Research Editor has done signal service for the magazine by her retrieving of good manuscripts and the painstaking manner in which she has set-up the magazine from month to month. A full report concerning the magazine will be given by Dr. John Foote, Chairman of the Editorial Board. The field service has been more broadly active than ever before. In May, just before Miss Leete started on her western itinerary, an Associate to the Field Director was added to our staff in the person of Miss Hazel Wedgwood, who rendered excellent service during the summer months. A summary

of Miss Wedgwood's activities will be found in the report of the Field Director.

No more encouraging development has taken place than the growth in our affiliated societies this year. Reports from these societies and the cooperation which they give are invaluable. The affiliated societies continue as a bulwark of strength to the Association. During the past year the number of state bureaus of child hygiene have grown to 44, and we have been in closer touch with them than ever before. We have had considerable correspondence with health officers and directors of state bureaus of child hygiene regarding the new programs for maternity and infancy which are now being worked out in the various localities. Your Director had the privilege of appearing before committees of the Maryland State Legislature to urge the necessity of establishing a bureau of child hygiene for that state, which bureau was finally created by act of the Legislature on its closing night.

The removal of our headquarters to Washington necessitated reorganization of our office staff. Our Field Director, Secretary to the General Director, and a young woman who was cataloging our library material were the only ones from the Baltimore office who were able to go to Washington. Unfortunately Miss Knipp could not go with us. Our Executive Committee has already expressed in a minute published in the June number of *Mother and Child* the loss we suffer and the regret we all feel in having Miss Knipp leave the executive offices. Too much credit cannot be given her for the untiring devotion which she gave for many years to the Association. In our new headquarters we have been able to secure sufficient space to comfortably house all of our departments. We have developed a mechanical department with complete set-up for multigraphing, mimeographing, and addressographing which is made use of by the National Health Council, National Child Health Council, and Child Health Committee as well as by ourselves. During the past year our library material, including books, exchange magazines, pamphlets and reports, has been carefully listed and filed so that we now have a complete card index of all the material we possess and a librarian who keeps it up to date. The office of the magazine has been established at one end of the library. On the second floor of our headquarters are the main business offices of the Association. In the set-up of these offices and in the selection of the new personnel, Mrs. Reese, our Office Secretary, has played a large

part. Our office files have been completely consolidated and made easy of access. A direct business responsibility has been established. The new staff has adjusted itself well to its new responsibilities and has worked in season and out, especially in the busy weeks just before the annual meeting. The offices will be open to our members during the meeting, and it is hoped that every member will become acquainted with our office staff.

Upon vote of our Executive Committee, space in the same building as our office was provided by our Association for the office of the National Child Health Council. The officers for the new Child Health Committee which is directing the demonstrations provided for in the program supported by the Commonwealth Fund are also in the same building.

The committee is composed of representatives of the Commonwealth Fund, the Child Health Organization of America, and the American Child Hygiene Association. This committee has held three meetings, and Mr. Courtney Dinwiddie has been selected as its Executive Secretary. The three cooperating organizations will assist in developing the program. The Child Health Demonstration at Mansfield, Ohio, under the direction of the National Child Health Council, has gone steadily forward and is now in excellent condition for future developments. The entire staff has practically been appointed and Dr. Walter H. Brown, the Director, has reported that the infant welfare centers are now being set up, close cooperation with doctors is being carried out, the nursing scheme is well under way, and the school health program has been initiated.

During the past year your General Director has continued to act as Secretary and Assistant Treasurer of the National Child Health Council. Regular meetings of the Council have been held and considerable has been accomplished in the way of coordination of child hygiene work. A better understanding among the constituent organizations now exists. One of the most tangible results of this was the Erie County Survey participated in by all member organizations, and resulting in a comprehensive survey of the conditions in Erie county, New York. This was very favorably received, not only by the people most directly concerned in Erie county, but also by a number throughout the country interested in coordination of field work. The advisory committees of the Council have also been at work and three reports

have been or are at the present time being issued, those on Malnutrition and Child Health Education. Your General Director has given considerable time and thought to conferences with the Executive Secretary of the Council and also with the other members.

One of the notable advances in child hygiene work during the past year has been the attention given to this subject in the many public health institutes held throughout the country. Your General Director was privileged to give lectures at two of these institutes. During the past year the General Director repeated his course of lectures at Johns Hopkins University, bringing out salient points in regard to maternity and child welfare. He was asked to bring together a group of the superintendents and directors of the hospitals of Baltimore to consider the establishment of a convalescent home for children near Baltimore. This eventuated in a representative board of directors being formed who have stood behind the development of an admirable convalescent home for children on the hills north of Baltimore. The entire property was fixed up and turned over to the board by a philanthropic gentleman in Baltimore. The Happy Hills Convalescent Home opened June 1st and has been running since with the capacity number of twenty children.

During the year the General Director has represented the Association at the following conferences:

The American Medical Association at St. Louis, Mo.

The National Conference of Social Work at Providence, R. I.

The State and Provincial Health Officers' Conference at Washington, D. C.

The American Public Health Association at New York City.

The Annual Meeting of the Federation of Day Nurseries at New York City.

The Michigan State Nurses Association at Muskegon, Mich.

The Central Division of the American Red Cross at Des Moines, Iowa.

The Conference on Health Education called by the Public Health Service of Washington, D. C.

The Health Education Conference called by the Child Health Organization and the United States Department of Education at Lake Mohonk, N. Y.

New York State Health Officers' and Nurses' Conference at Saratoga Springs, N. Y.

The American Pediatric Society at Washington, D. C.

The Christmas Child Welfare Conference in New York City.

The National Catholic Hospital Association at Washington, D. C.

He has attended regularly the meetings of the Child Health Council and Child Health Committee and held numerous conferences with individuals concerned in child welfare work. The following addresses were given:

Addresses on Maternal Welfare before the State Health Officers and Nurses of New York State at Saratoga Springs, N. Y.

The Christmas Child Welfare Conference in New York City.

The Michigan State Nurses Association at Muskegon, Mich.

The Annual Meeting of the Day Nurseries' Association in New York City.

The Central Division of the American Red Cross at Des Moines, Iowa.

Health Division of St. Louis Community Service, St. Louis, Mo.

Three lectures before the Pennsylvania School for Social Service at Philadelphia.

Address before executives of national health organizations at 370 Seventh Avenue, New York City.

It should be noted that a considerable part of the traveling expenses of the General Director were met either by the conferences inviting him to speak or by individuals interested in having him address their meetings, so that this was a distinct saving on the budget for his traveling expenses.

The Statistical Report on Infant Mortality for 1921 appeared earlier than ever before and was very favorably received throughout the entire country. Attention was given to it in a large number of newspapers and a great many comments came into the office. The special feature of recording the infant mortality among negroes in certain localities received favorable comment. This report probably brings the Association more newspaper publicity than any other activity, with the possible exception of the annual meeting.

During the past year the relationship between the Child Health Organization of America and the American Child Hygiene Association has grown so cordial that a proposal was made to bring about an

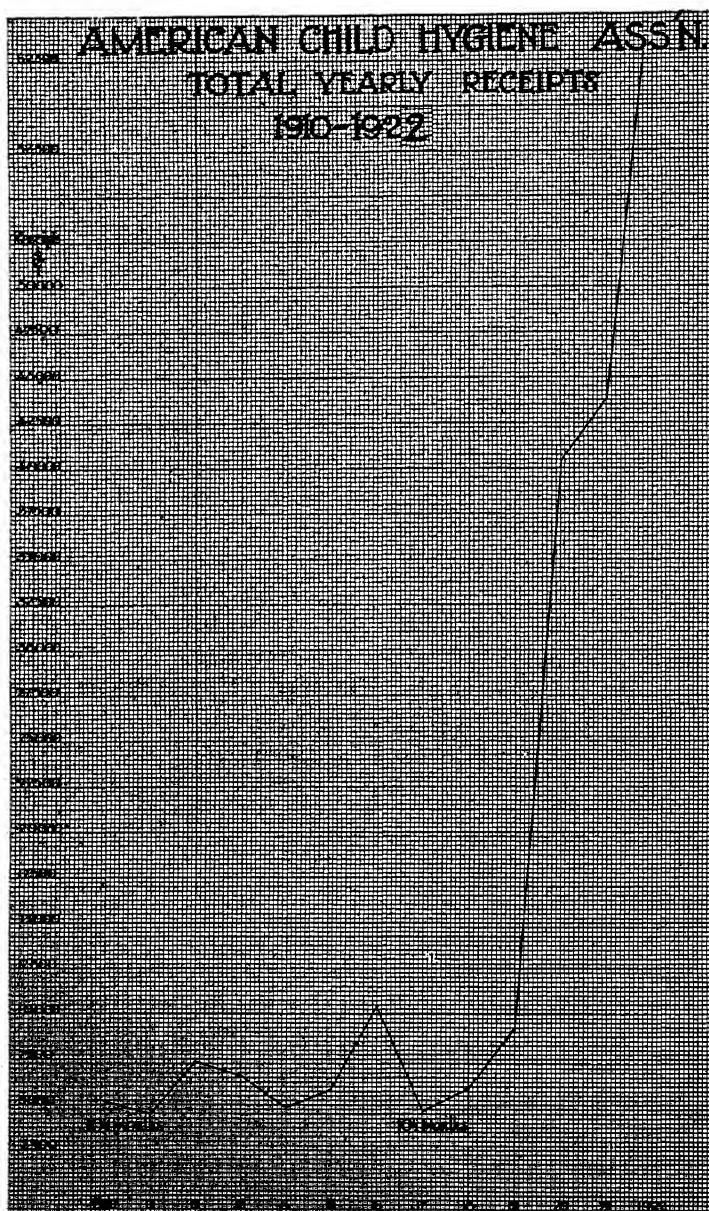
amalgamation of the two associations. A committee was appointed by Mr. Hoover to negotiate with the Child Health Organization to see if this could be brought about. At a special meeting of the Board of Directors held in June sixty-six directors either present or by proxy cast their votes in favor of consolidation. The committee has been in conference with the Child Health Organization and its report will be presented for final action by the Association at this meeting.

Our Association has now reached its high water mark in interest and support of our members and in the services which we are able to render our affiliated societies. Our Executive Committee and Board of Directors have taken more interest in the Association this year than ever before, and have shown this interest in a substantial way in securing memberships and support for the Association. If this Association is to fulfill the large mission which has been the dream of its founders and supporters, it must now reach out in influence and help to the farthest corners of this country. In order to accomplish this and to cover a broad program for child hygiene, it must join hands with other national organizations dealing with special phases of child hygiene and secure a larger support by increasing its membership and securing from interested individuals and foundations large enough support to make its program effective. The first step in this larger field for usefulness will be the consolidation of the American Child Hygiene Association with the Child Health Organization of America.

Respectfully submitted,

R. A. BOLT, M. D.,  
*General Director.*





# AMERICAN CHILD HYGIENE ASSOCIATION

## FINANCIAL STATEMENT \*

October 1, 1921 to September 30, 1922

Balance on hand October 1, 1921..... \$220 03

### RECEIPTS

Membership	
Active.....	\$8,594 23
Affiliated.....	2,062 81
Library.....	134 17
Contributing.....	1,330 00
Sustaining.....	675 00
	<hr/>
	\$12,796 21

### Contributions:

National A. R. C.....	\$15,000 00
N. Y. Commonwealth Fund.....	7,500 00
Carnegie Corporation.....	5,000 00
L. S. R. Mem. Fd.....	10,000 00
General.....	648 00
To field work.....	197 68
To membership campaign.....	40 00
From directors.....	3,885 00
From President of the association.....	5,000 00
	<hr/>
	\$47,270 86

Transactions—Sale of printed copies.....	328 00
Subscriptions to <i>Mother and Child</i> .....	439 03

### Refunds:

Account postage.....	56 90
Account Dr. Bolt's traveling expenses.....	344 15
Account Miss Leete's traveling expenses.....	3 75

Interest on bank balances.....	153 53
Exhibit.....	5 00

### Sale of

Furniture to Miss Knipp.....	15 00
Circulars.....	365 84
Magazines at conference.....	15 50
Reprints.....	184 47
Upjohn posters.....	155 10
Hand addressograph.....	40 00
Lumber.....	6 00
Electric fan.....	5 00

Refunds—Account express, moving, repairs, ice, telephone, mimeograph and addressograph work.....	284 23
	<hr/>
	62,468 37

\$62,688 40

### DISBURSEMENTS

#### General

Salaries.....	\$21,131 04
Traveling expenses.....	1,306 24
Rent.....	1,569 06
Telephone.....	361 32
Furniture.....	471 22
Supplies.....	2,216 31
Postage.....	982 70

#### Printing

General.....	\$781 21
Stationery.....	340 42
	<hr/>
	1,121 63

Miscellaneous.....	659 10
Telegrams.....	89 23
Expressage.....	67 03
Books and magazines.....	138 25
Light and power.....	26 05
Moving and fitting up offices.....	1,002 94
	<hr/>
	31,142 12

\* The books of the American Child Hygiene Association were audited on April 22, 1922, on removal of headquarters from Baltimore, Maryland, to Washington, D. C. Additional audit was not made on close of fiscal year, September 30, 1922, as customary, but was made as of December 31, 1922, when the assets of the American Child Hygiene Association were turned over to the American Child Health Association. Copy of audits may be had upon request.

## DISBURSEMENTS—continued

Educational			
Publicity service.....	\$54	00	
Salaries.....	7,113	33	
Printing magazine.....	6,418	31	
Postage.....	607	91	
Traveling expenses.....	271	12	
Clerical help.....	6	89	
Incidentals.....	126	15	
Printing, special.....	588	99	
			\$15,186 70
Extension and field work			
Salaries.....	5,720	29	
Traveling expenses.....	2,174	12	
Incidentals.....	522	52	
Exhibits.....	449	50	
Clerical help.....	31	85	
			8,898 28
Annual meeting			
Traveling expenses.....	316	70	
Printing, general.....	635	00	
*Printing, transactions.....	4,033	97	
Clerical help at New Haven.....	148	85	
Postage.....	196	96	
Official stenographer.....	175	00	
			5,506 48
			60,733 58
Balance on hand September 30, 1922.....			\$1,954 82
Balance in bank.....	\$1,882	51	
Balance in petty cash.....	72	31	
			\$1,954 82

\* This figure includes the 1921 transaction deficit of \$2,220.30.

**Membership October 1, 1921 to September 30, 1922**  
**Compared with Corresponding Period for 1921**

	Life members, 1910-1922	1922	1921
Alabama.....	.....	7	4
Arizona.....	.....	2	2
Arkansas.....	.....	3	.....
California.....	.....	78	63
Colorado.....	.....	28	53
Connecticut.....	1	105	94
Delaware.....	.....	6	7
District of Columbia.....	.....	46	38
Florida.....	.....	3	3
Georgia.....	.....	14	32
Hawaii.....	.....	5	4
Idaho.....	.....	4	2
Illinois.....	.....	96	97
Indiana.....	.....	21	28
Iowa.....	.....	22	20
Kansas.....	.....	10	9
Kentucky.....	.....	16	13
Louisiana.....	.....	17	18
Maine.....	.....	9	7
Maryland.....	5	96	114
Massachusetts.....	1	136	164
Michigan.....	1	65	56
Minnesota.....	2	50	62
Mississippi.....	.....	1	4
Missouri.....	1	109	229
Montana.....	.....	3	3
Nebraska.....	.....	12	12
Nevada.....	.....	1	1
New Hampshire.....	.....	6	6
New Jersey.....	.....	49	54
New Mexico.....	.....	2	2
New York.....	2	328	307
North Carolina.....	.....	16	10
North Dakota.....	.....	3	3
Ohio*.....	2	*54	*62
Oklahoma.....	.....	5	4
Oregon.....	.....	26	24
Pennsylvania.....	7	216	260
Philippine Islands.....	.....	6	5
Rhode Island.....	1	16	15
South Carolina.....	.....	6	5
South Dakota.....	.....	7	3
Tennessee.....	.....	9	7
Texas.....	.....	16	16
Utah.....	.....	6	4
Vermont.....	.....	2	2
Virginia.....	.....	27	57
Washington.....	.....	23	32
West Virginia.....	.....	4	6
Wisconsin.....	7	36	53
Wyoming.....	.....	2	3
Australia.....	.....	1	1
Brasil.....	.....	1	.....
Canada.....	.....	40	28
China.....	.....	2	5
England.....	.....	3	3
France.....	.....	1	1
Greece.....	.....	1	.....
India.....	.....	2	1
Ireland.....	.....	1	1
Mexico.....	.....	.....	1
Montenegro.....	.....	1	.....
New Zealand.....	.....	2	4

\* This number does not include 73 individuals and 30 organizations covered by Cleveland Community Fund.

## MEMBERSHIP

	Life members, 1910-1922	1922	1921
Panama.....			1
Poland.....		1	
Siam.....		1	
Spain.....		1	
West Indies.....			1
	<hr/>	<hr/>	<hr/>
	31	1,890	2,126
Life members.....		31	32
Honorary members.....		13	13
		<hr/>	<hr/>
		1,934	2,171
		<hr/>	<hr/>
Membership by classes—1921 and 1922	1922	1921	
Sustaining members.....	23	30	
Contributing members.....	108	128	
Affiliated societies.....	290	273	
Library members.....	71		
Active members.....	1,398	1,694	
Life members.....	31	33	
Honorary members.....	13	13	
Covered by Cleveland Community Fund.....	103	61	
	<hr/>	<hr/>	
Total.....	2,037	2,232	
	<hr/>	<hr/>	

# AMERICAN CHILD HYGIENE ASSOCIATION

## REPORT OF CLERICAL WORK

October 1, 1921 to September 30, 1922

Total pieces of mail.....	107,337
Total 1st class.....	*37,999
Total 2d class.....	33,255
Personal letters.....	12,014
Circular letters (1st cl.).....	21,831
Bills and receipts.....	4,154
Questionnaires.....	330
Postals.....	2,794
Postals—Re 1921 transactions.....	850
Transactions	
Vol. I.....	1
Vol. III.....	1
Vol. IV.....	1
Vol. VI.....	1
Vol. VII.....	1
Vol. VIII.....	2
Vol. IX.....	5
Vol. X.....	5
Vol. XI.....	220
Vol. XII.....	1,513
Preliminary program, 1921 meeting.....	4,827
Final program, 1921 meeting.....	2,833
Preliminary program, 1922 meeting (supplement) Sept., 1922 M. & C.....	4,342
Press bulletins.....	1,277
Statistical charts, 1919.....	8
Statistical charts, 1920.....	191
Statistical charts, 1921.....	2,148
Digests, 1921.....	36
Diagrams.....	5
Annotated subject index.....	3
Cumulative index, Vol. I, M. & C.....	1
Cumulative index, Vol. II, M. & C.....	9
Supplement to May, 1922, M. & C.....	2,783
Packages.....	5,405
Magazine <i>Mother and Child</i> issues October 1921 to October 1922, inc. Envelopes for which were addressed, stamped, zoned and prepared for mailing in the circulation department (See supplemental statement).....	36,083
Leaflet No. 1:	107,337
Through orders.....	1,580
Through office.....	1,435
Motherhood:	
Through orders.....	8,265
Through office.....	1,825
Suggestions for Organization of Baby Saving Work:	
Through orders.....	1,000
Through office.....	1,630
Common Cold:	
Through orders.....	4,805
Through office.....	1,781
Prenatal Record Forms:	
Through orders.....	15
Through office.....	1,104
Postnatal Record Forms:	
Through orders.....	
Through office.....	1,079
Child's History Record Forms:	
Through orders.....	112
Through office.....	337
Record Infant Care.....	1,080
Prenatal Committee Report.....	413
Reprints.....	15,350
Bioters, 1921 meeting.....	243
Bioters, 1922 meeting.....	2,414
Membership Circular No. 1.....	1,085
Membership Circular No. 2.....	12,883
Membership cards.....	11,316
Reprints American Child Hygiene Association publications.....	644
Rate sheets.....	306
M. and C. subscription blanks.....	2,709

\* This includes 720 letters sent out by the chairman of the Editorial Board.

Supplemental Statement, Re *Mother and Child*

Total copies of *Mother and Child* distributed from October 1, 1921 to September 30, 1922, as follows:

(1) Issues of October, November, December, 1921, January, February, March, April, May, June, July, August, September, October, 1922, as members, subscribers, exchange and mailing list.....	36,083
(2) With sample copies of circulars, and in packages to authors, in response to requests, etc...	14,425
	<hr/>
	50,408
	<hr/>

## REPORT OF THE FIELD DIRECTOR

The report of your Field Director will take you over new trails this year. Occasionally these trails have crossed the paths of preceding years, but on the whole, time has been spent in extensive travel rather than in any intensive study, and a vivid impression of the general characteristics of new centers of health activities with their approximate environments has been received.

The three outstanding happenings in the Field Department have been:

1. Five trips in the field, three by the Director and two by the Associate Director.
2. Conferences and committee work by the Field Director with associated national organizations.
3. The temporary appointment of Miss Hazel Wedgwood as an Associate to the Field Director.

Miss Wedgwood, who remained at headquarters during the extensive trip of the Director, continued with the organization of the office files in the field department, carried out the policy established in 1921 by the General Director, that of carrying on all correspondence with the nursing profession. She was responsible for the preparation of all of the statistical material in the affiliated societies report, and for all of the routine work in the field department during the absence of the Field Director.

You know why our field work was undertaken; I propose to make a brief analysis of types of work surveyed, to present tentative plans for a further development of the field service, and to mention places seen.

An increase in the number of affiliated societies is most gratifying and while it alone does not signify wherein true progress lies, it does connote that a fresh impetus has been given to the study of the health needs of mothers and children, and also proves to us that our unique form of organization holds within its grasp untold opportunities for rendering service which is not only national but international in scope. Visits were made to affiliated societies, to related organizations, and to public officials. An attempt was made to render service to the com-



munity visited in the form of conferences, talks, consultations, and in lectures and class work.

My hope is that I have served as an interpreter between the organizations as seen in their own communities and the directors of the American Child Hygiene Association. That you may know more readily where the field work has been extended, a route map was made which may look somewhat like a weather map — all sorts of names have been given to it — but, it is in reality a tracing of the journeys of your Field Director in nineteen hundred and twenty, twenty-one, and for the fiscal year which closed September thirtieth of this year.

The line which indicates the route of the past year is approximately 14,591 miles in length.

The short trips taken were to Pennsylvania, Ohio, and New York, while the long western journey zigzagged back and forth through the central states, out to the coast. The return trip was through the marvelous, rugged Canadian Rockies where the very mountains themselves, and beyond the mountains, the vast stretches of open country, or "unorganized territories" as they are called, make for a difficult execution of any constructive plan of health building.

In the 1921 report of the Field Director, your attention was called to the wide variance in types of work carried on by organizations visited; the inquiries in the field this past year were answered by members of associations and organizations whose ideals and methods of procedure are as divergent in character as have been those of other years.

The apparent next task is to study the material obtained in the field, note its salient points, and record the findings. This shall be the purpose of your Field Director in the immediate future.

It is not possible in this report to summarize, even briefly, activities by subject headings. It is possible, however, to call especial attention to a few of the divisions which are making progress, and which present problems for our consideration; other types of service of equal importance will receive recognition in a subsequent report.

## **Nursing**

Because your Field Director and her Associate are nurses, possibly because much of the field work has been advanced by public health nurses, perchance, because the meeting of the national nursing organi-

zations was in the foreground for the greater part of the year, more time was given to the problems confronting nurses than to those of any other one group.

The function of the nurse in the field has been so changed in character, and so extended in point of service, there has been an increasing demand for information and equipment which will assist her in the execution of her work. Especially does she wish to have a sound scientific professional understanding of normal child health, growth and development, and also to have literature available which will make it possible to present such information to the community in readable, clear-cut fashion. This is to include the development of the child physically, mentally, emotionally, and socially.

Dare we longer allow mere lack of funds to permit us to fail in actually placing within the reach of workers in the field material which is both sound in substance and attractive in form?

It is an incontrovertible fact that the women who so valiantly led the way and built the firm foundations of nursing structure which can withstand the waves of modern attempts to substitute short-term courses, have always signified their desire for more adequate training in child health work. In this age of the child such attributes are requisite. We should be able to stimulate and direct public opinion which will make it financially possible for directors of schools for nurses to obtain the equipment and the personnel with which to carry on satisfactory, adequate courses in child care. As an organization, we should be able and willing to make our contribution to nursing education. It follows logically that our nursing standards must be set in conjunction with the representatives of the National Organization for Public Health Nursing and with those of the League of Nursing Education.

At present, all nursing applicants for child welfare or child health positions and all child welfare associations seeking for nurses to develop their work, are referred with our comments to the Placement Bureau of the National Organization for Public Health Nursing. Inter-relations with the National Organization for Public Health Nursing are made even more easily understandable, if possible, by the election of your Field Director as a member of the Executive Committee of this organization, and of the Common Activities Committee of the three national organizations. It would appear to be reasonably simple to build the

child health nursing service in such a manner that no overlapping or duplication could ever occur.

Some of you may know the little girl, who, wandering from the garden, asked her mother, "Did you hear the ladder fall?" The mother replied in the negative, and Nancy vouched the information that the ladder had fallen and broken three flower pots, "and I told daddy you'd be cross." The mother, busy with her own work, replied, "I hope your daddy wasn't hurt." Whereupon Nancy said, "No. He isn't yet,—he's still hanging to the window ledge." We, too, like children, sometimes leave handicapped children hanging to the window ledge, while we give our attention to the broken flower pots of personal endeavor, which must sink into insignificance when compared to the big problems of actually reaching the handicapped children of the Nation, and of other countries, in a big, effective manner.

This Association has built parts of this strong ladder of prevention which shall reach all children in danger of falling. May we test it for immediate use as visualized in the field? One side should be made of sound technical information which can be obtained only through well trained professional groups. This has been built by the sustained efforts of the scientific, professional members who have been organized to teach positive health since the inception of the Association in 1909.

The other side of the ladder which should be of equal strength if the ladder is to be stable, is called in common terms, health education. In other words, we must make it possible to disseminate our professional knowledge to the community in usable terms. This side of the ladder is altogether too short and the ladder is in danger of toppling unless we immediately brace and lengthen our health education side.

The rounds of the ladder by which we can reach the children hanging to the window ledge of partially effective activities, are, many of them, well rounded and can fit into the sides easily and safely. Some of the rounds which have been reported to you many times are those of pre-school activities, infancy consultations, nutritional requirements,\* and maternal welfare facilities. The round of maternal welfare is in sad need of strengthening. It appears to be hollow in the middle, for while prenatal talks by nurses are common, and public interest through women's clubs of all descriptions has been aroused, seldom is good obstetrical care available for all patients living in rural communities.

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\* Campaign against Malnutrition, National Child Health Council, Washington, D. C.

Other rounds are those of:

### 1. Industry

A picture of a health center in a steel mill community emphasized our close relation to the industrial world, for nowhere do we think in terms of life complicated by the strain of intensive struggle as we do in the neighborhood of the steel plants. A close touch must be kept with the industrial world if we are to gain the slightest comprehension of the underlying factors which influence child life in congested centers.

### 2. Child Welfare

One only has to travel a short distance to learn that the terms child welfare and child health are in need of defining. Can we rightly separate child health and child welfare? Does there appear to be two distinct ladders? Can they be spliced securely enough to make the ladder reach the highest point? It will take time, adaptation, and patience enough to work slowly but surely, but it can be done.

Some of the rounds of child health are contributed by public authorities, some through private enterprise, but so long as they are sound and there are no gaps, they will hold.

### 3. Research

No sound scientific truth was ever released to the public unless it had been previously proved by thorough, painstaking men and women who are willing to devote their time to intensive, minute, detailed study. Our obstetricians and pediatricians have given us our basic safe rounds which will stabilize and strengthen the entire ladder. Many of these rounds have been described in the transactions of the Association.

Another type of research work is now in the foreground, and demonstrations like the one in Mansfield, under direct supervision of the National Child Health Council will be invaluable for future planning.\* This type of research work can be advanced in an immeasurable manner through a close correlation with our affiliated societies, who have in service the equipment for establishing such centers.

One hardly dares to call attention to coordination by subject title, it has been worn so threadbare, but the thought expressed by J. M. Barrie

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\* Nation's Health, Mansfield's Child Health Demonstration, September, 1922. Page 577, Volume IV, No. 9.

is, "We do not discuss what the great ones of the earth say, but what they meant when they said it." Truly the leaders of action who present the subject of coordination mean that we shall be woven into a harmonious whole even though in actual achievement we have gone such a little way. We do, some of us, still discuss the broken flower pots of selfish endeavor.

Just one more point in our ladder building. It must have a sound economic base, and after all, which is the cheaper, to build the ladder high enough, and strong enough to reach to the top, or to mend the broken bones after the fall? Specifically, we desire financial support which will add to our staff trained people to work with the affiliated societies and to make it possible to take the scientific information available and translate it into usable forms for all of the people.

Dr. John Lowman, one of the pioneers in the advancement of the creed of positive health for all children, believed in the "method which involved the suppression of all that is selfish in individual or organization for the general good." Quoting again from Dr. Lowman's Memorial, we learn that he said, "It is for us to practice that fine economy of adaptation which selects the fittest means for the accomplishment of the end in view."

While a formal closing of this report may be in the nature of a commonplace, it truly expresses a real desire to give public recognition of my genuine appreciation of the cordial hospitality and gracious courtesies shown during the past three years to a representative of your Association.

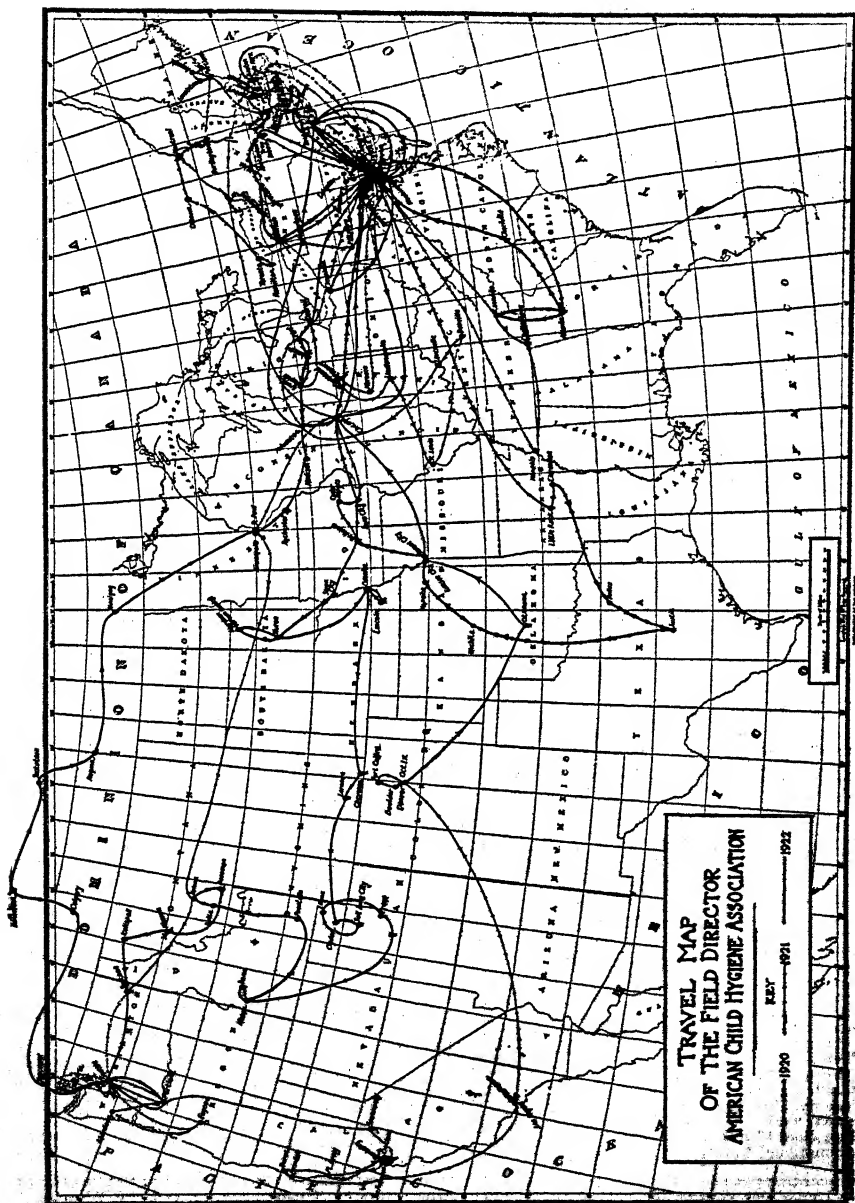
It has been a rare privilege to receive a friendly assurance of actual interest in our organization and in its activities from health, educational, and social workers in thirty-four states.

The field service would not have been possible except for the friendly assistance given from our central office where the personal attention to the minutest detail of travel left me free to obtain a wide prospective of diversified interests which when properly analyzed must serve its part in interpreting national needs to you who have always loyally rendered encouragement and inspiration.

Respectfully submitted,

HARRIET L. LEETE, R. N.,

*Field Director.*



# AMERICAN CHILD HYGIENE ASSOCIATION

## AFFILIATED SOCIETIES

### REPORTS

For the Year Ending September 30, 1922

In accordance with Article X of the By-Laws, the affiliated societies were asked as usual for reports of their activities. A suggested outline was sent to each society with a letter of explanation asking for a brief description of the most distinctive features of their work.

The suggested outline for reports is given in full below, followed by the reports as sent to the Washington office. The marginal figures in the reports refer to the corresponding ones in the outline.

### SUGGESTED OUTLINE FOR REPORTS

Name of organization.

Date organized.

City and street address.

Number on governing board. Men. Women. Total.

Name of president or chairman.

Aim or object of organization.

Scope of work: Federal. State. County. City. Town.

Population in territory covered: Urban. Rural.

Transportation facilities: Good. Fair. Poor.

Roads: Good. Fair. Poor.

### TYPE OF WORK

	Home Visiting	Clinics	Classes	Hospital	Research	Health Center	Mobile Unit	Other
Maternal.....								
Pre-Natal.....								
Obstetrical.....								
Post-Natal.....								
Infancy.....								
Pre-School.....								
School.....								
Adolescence.....								
Other Adults.....								
Preventive.....								
Educational.....								
Own Publication.....								
Visual.....								
Dental.....								
Mental.....								
Cardiac.....								
Orthopedic.....								
Industrial.....								
Sickness *								
Communicable Disease.....								
Tuberculosis.....								
Health Crusader.....								
Veneral Disease.....								
Special work.....								
Dependent Children.....								
Occupational Therapy.....								

\* Under this heading, do not include Communicable Diseases, Tuberculosis, or Venereal Diseases.

# STAFF

- Name and title of paid executive.  
 Name of director or supervisor, medical service.  
 Number of physicians: Full time. Part time. Paid. Volunteer.  
 Name of Director or Supervisor, Nursing Service.  
 Number of supervising nurses: General. Special.  
 Number of staff nurses: General. Special.  
 Name of Director or Supervisor, Dental Service.  
 Number of dentists: Full time. Part time. Paid. Volunteer.  
 Name of director or supervisor, social service.  
 Number of social workers: Full time. Part time. Paid. Volunteer.  
 Name of director or supervisor, nutritional service.  
 Number of nutritionists. Full time. Part time. Paid. Volunteer.  
 Number of clerical assistants.  
 Number of volunteers with no special training.

Remarks:

# FINANCIAL

- A. Total budget for the current fiscal year.  
 B. How is your organization supported? Membership dues. Appropriation from city or state. Special contributions. Community chest.  
 C. What method or methods have you found most successful in raising funds?  
 D. What fee, if any, does your organization charge for its work?

# COOPERATING AGENCIES

- A. Does your town, city or county have a Children's Council?  
 B. Is there a Division of Child Hygiene in the Health Department of your State.  
 County. City. Town.  
 C. Please list below the names of all cooperating agencies:

# AFFILIATED AGENCIES

- Please list below the names of your affiliated agencies: \*  
 Special conditions in community (not already covered) which have some bearing on the work of your organization:  
 Annual report enclosed? Yes. No.  
 Copies of records enclosed? Yes. No.  
 Written or printed instructions to members of staff enclosed? Yes. No.

# STATISTICAL

NOTE: If no Annual Report is enclosed, please give statistical information as follows:

Figures for fiscal year ending	Pre-Natal	Obstet- rical	Post-Natal	Infant care	Pre-School	* Older
Average number patients enrolled at clinic						
Number visits of patients to clinic.....						
Number home visits paid.....						
Total number patients given home care...						
Total number patients given hospital care						
Infant mortality rate.....						

\* Please give age limit  
 Supplemental Statement:

Submitted by:

Title  
 Date

N. B.— Please send your report to 532 Seventeenth St., Washington, D. C., AS SOON AS POSSIBLE, so that attention may be directed to your activities in the summary of the reports from Affiliated Societies, which will be prepared for the Washington meeting. PLEASE SEND THREE COPIES OF THE SUPPLEMENTAL STATEMENT.

\* Please list all agencies with whom you are doing a joint piece of work.



**CALIFORNIA****LONG BEACH DAY NURSERY****Long Beach**

1. Organized November 1, 1912.
2. Aim: Organized for the purpose of assisting working widows and deserted mothers, also widowers of small means to keep a home for their children.
3. Board: The governing board consists of 15 women.
4. Territory: The nursery serves an urban territory, which has a population of 75,000.
5. Staff: Superintendent of the nursery, who is also supervisor of social service and nutrition work. Supervisor of medical service. Nurse: 1. Doctors: 2 part time. Dentists: 1 supervisor, 5 part time. Social worker: 1 part part time. Nutritionist: 1 part time. Volunteer workers: 2.
6. Type of work: Home visiting and classes for infants, pre-school and school children.
7. Financial: Supported by membership dues, appropriations and special contributions. The Rotary Club Drive has been most successful in raising funds for the nursery.
8. General statement: Children from one to ten years of age are admitted to the Day Nursery. During the past year a mothers' club was organized and an emergency fund was established for the purpose of the rehabilitation of broken homes.

**BABY HOSPITAL ASSOCIATION****Oakland**

1. Organized September 11, 1912.
2. Aim: The corporation was organized without capital stock, and not for pecuniary profit, but for the purpose of providing a temporary home and a hospital for the care of sick babies and for the care of babies who need attention for the reason of death, sickness or other disability of their parents; to establish and maintain a social service department for physical and moral betterment of babies and their home conditions; to obtain, receive, hold, use and enjoy real and personal property by gift, devise, bequest, barter or purchase, and to do and perform all other things necessary or convenient for the purposes hereinbefore set forth or permitted under the laws of California.
3. Board: There are two separate boards, the board of directors which consists of 9 men, and the board of managers which is composed of 15 women.
4. Territory: The association serves the county district, which has an urban population of about 216,361 and a rural population of about 44,000.
5. Staff: Superintendent of the hospital and superintendent of the clinic. Doctors: 1 part time. Nurses: 1 supervisor, 5 staff. Dentist: 1 part time. Clerical assistants: 2. Volunteer workers: 1.
6. Type of work: Hospital care is given to infants and pre-school children. Home visiting and clinics are offered to prenatal, obstetrical and postnatal patients, as well as to infants and pre-school children. Both home visiting and hospital care are offered to eye, orthopedic, and venereal disease patients.
7. Financial: The budget for the fiscal year was approximately \$50,000.00. The association is supported by membership dues, an appropriation from public funds, special contributions and a bazaar given yearly. Hospital fees are regulated for each case.
8. General statement: The number of patients given hospital care during the year was 862; the infant mortality rate for the hospital was 3.01%.

# CALIFORNIA DAIRY COUNCIL

San Francisco

1. Organized January, 1919.

2. Aim: Organized for educational purposes: To arouse all people to a realization of the supreme necessity of a liberal use of milk and milk products in the diet of children if they are to attain the physical and mental development which can not otherwise be acquired; to enlighten the public concerning the superlative value of dairy products in maintaining the bodily and mental vigor of adults; to aid in increasing production, and raising standards of quality; to improve methods of manufacture and distribution, and to stabilize prices.

3. Board: The council is governed by a board of 21 men.

4. Territory: The organization is state wide in its scope and as such serves about two million people.

5. Staff: A secretary-manager. Nutrition workers: 3. Clerical assistants: 6.

6. Type of work: The activities of the California Dairy Council fall naturally into the the following divisions: educational work on the nutritional value of dairy products as human food; dairy improvement work; educational work on the importance of the dairy industry to the economic welfare of the state; and legislative work in the protection and encouragement of the dairy industry. During the period of this report the secretary has addressed forty meetings of city people and the southern representatives addressed numerous gatherings of the same kind. Visual exhibits were maintained at thirty-five fairs and shows in connection with which a representative of the council was always present; literature was distributed and lectures were given.

7. Financial: The council is supported by membership dues.

8. General statement: A large amount of work was carried on in the schools. For the extension of the program one worker was provided for out of the general council funds designated for that purpose. It is hoped that work under this special fund arrangement will be widely extended during the coming year. Just before the opening of schools in January, 1921 arrangements were made for the council to conduct special demonstration nutrition classes in a number of the public schools.

## BABY HYGIENE COMMITTEE, SAN FRANCISCO BAY BRANCH OF THE AMERICAN ASSOCIATION OF UNIVERSITY WOMEN

San Francisco

1. Organized, 1909.

2. Aim: The maintenance of a Children's Health Center for the instruction of mothers in the feeding and hygiene of infants and children of pre-school age; maintenance of a clinic and feeding conference for foster babies of Associated Charities and supplying certified milk to these foster babies; training of doctors and lay workers in the conduct of Health Centers.

3. Board: The governing board consists of 25 women.

4. Territory: The association serves an urban territory with a population of 508,410.

5. Staff: Doctors: 1 director, 9 volunteers, a visiting nurse and social service worker. Nutritionists: 7 volunteers. Volunteer workers: 15.

6. Type of work: A Health Center is maintained for infants, pre-school and dependent children. Home visiting and educational work is conducted, and clinics are held for dependent children.

7. Financial: The budget for the year was \$4,111.94. The association is supported by subscriptions; donations; appeal to the public through an annual letter; and "small red stockings for the children's pennies." There is no charge for the service rendered.

8. General statement: During the past year a dental conference has been opened in connection with the pre-school conference. The results have proved the need for education of the mother in the care of the child's teeth. The committee is planning to make this a weekly conference instead of a monthly one. The activities of the Health Center are educational. When the mother has no family physician and can not afford one, she is referred to the hospital clinic for treatment.

## CANADA

### PROVINCE OF ALBERTA

#### DEPARTMENT OF PUBLIC HEALTH, PUBLIC HEALTH NURSING SERVICE

##### Edmonton

1. Organized April 1, 1918.

4. Territory: The work of the Department covers the Province of Alberta.

5. Staff: The Minister of Health, deputy minister, superintendent and assistant superintendent of nurses, 24 field nurses.

6. Type of work: The work includes health inspection of school children; tuberculosis follow-up work; child welfare and district nursing.

7. Financial: The total budget for the year was \$80,000. The Department is supported by the Government.

8. General statement: The Nursing Branch of the Province of Alberta came into existence in 1918 under the supervision of the Department of the Provincial Secretary, and was transferred to the Department of Public Health in April 1919 when that Department was created. Commencing with a staff of four nurses, we arrive at the present year with a staff of thirty. To meet the demands for a post-graduate course in Public Health Nursing which would fit the nurses for this service, the University of Alberta, acting with the Department of Public Health for the past two years have put on a three months' course in Public Health. The work of the Public Health Nursing Branch is very diversified and covers a wide range of activities, which may be described as follows:

Medical Inspection of Rural Schools, Child Welfare Clinics, Traveling Lecturers, Teaching "Home Nursing" and "First Aid" to students of Agricultural Schools, District Nursing.

In 1921 the School Inspection Nurses visited 563 schools, conducted upwards of 11,000 inspections; held 113 Child Welfare Clinics and made 1,500 home visits. A feature that is ever prominent and demands first and last attention is the Child Welfare Clinic which embraces the triple heading of prenatal, infant and pre-school age. The ultimate effort of the nurse is to reach mothers and babies in her district through whatever channels present themselves. The work of the clinic is found invaluable and the response most gratifying. By means of the School Inspection and follow-up work, Child Welfare Clinics are readily established in each public health nurse's district. With the cooperation of the City of Edmonton, a Child Welfare Clinic is conducted twice a week during the entire year. From the first of this year there has been an average attendance of 34, and 475 home visits per month have been made. A similar type of clinic is conducted by our Branch at Medicine Hat and Calgary. The drought stricken area of the southern part of the Province has claimed special attention. Four nurses were stationed there doing survey work and occupying themselves in any capacity in which the services of a nurse could be helpful to the people. The result of this survey has been the means of bringing material relief to these sorely pressed settlers and provision made for the proper medical care of children, who, through the misfortune of existing circumstances have been unable to obtain proper treatment.

Because the nurse lives in her district and, therefore, comes in close contact with her surroundings, not infrequently she has been able to draw attention to the proper authorities of existing conditions and defects which otherwise would not be discovered; especially is this true in the case of neglected children and mental defectives.

The predominant feature of the extension work for this year is the opening up of districts in the foreign speaking settlements. Two public health nurses will work among these new Canadian citizens which are comprised principally of Ukrainians. These people take most kindly to the work of a nurse and are eager to accept Canadian teachings. Four nurses specially qualified to lecture tour the Province with moving picture machines and health films. They also conduct classes in "Home Nursing" and "First Aid." In the sparsely settled districts where there is no medical aid for mothers, the Government of Alberta sends graduate nurses with special obstetrical training.

Establishing Child Welfare Clinics is a part of their routine work.

## PROVINCE OF BRITISH COLUMBIA

### PROVINCIAL BOARD OF HEALTH

Victoria

5. Staff: The Child Welfare Committees of British Columbia are organized through the Women's Institutes. A permanent Provincial Secretary keeps in touch with the work and the committees are linked up with the Public Health Nursing scheme.

6. Type of work: The work is rather general in character but concentrates upon the health of school children.

7. Financial: The organization is supported by voluntary contributions from each institute. The expenses in connection with meetings of committees for the districts are borne by the Department.

8. General statement: Our nurses are especially trained in our own university and the best indication of the progress that we are making is the evidence of public interest. At first it was rather disheartening but latterly we are being spurred on by the committees and they are keeping us well keyed up.

## PROVINCE OF NEW BRUNSWICK

### CHILD WELFARE DIVISION OF THE DEPARTMENT OF HEALTH

Fredericton

1. Organized October, 1918.

2. Aim: The purpose of the organization is child welfare.

3. Board: The organization is under the management of the Department of Health.

4. Territory: The work of the organization covers the entire province, which has a population of 388,000.

5. Staff: The regular staff of the Department of Health carries on all child welfare work.

6. Type of work: Home visiting, clinics and classes are provided for infants and pre-school children. Hospital care is given to obstetrical patients, infants and pre-school children. Health Centers and mobile units are maintained.

8. General statement: The cooperating agencies are: The provincial Red Cross, Victorian Order of Nurses, Anti-Tuberculosis Society, Women's Institutes, Imperial Order Daughters of the Empire, Junior Red Cross, and St. John's Ambulance Society.

## PROVINCE OF NOVA SCOTIA

### MASSACHUSETTS-HALIFAX HEALTH COMMISSION

#### Halifax

1. Organized September 22, 1919.
2. Aim: To establish and coordinate an ideal preventive medicine program within five years. To save a life a day, making the demonstration so practical that the city, town and community will continue all measures proven of value in cutting down sick rates and death rates.
3. Board: The governing board consist of 9 men.
4. Territory: The commission serves an urban territory with a population of about 66,271, and a rural territory with a population of about 350.
5. Staff: An executive officer. Doctors: 3 full time, 12 part time. Nurses: 1 chief, 2 public health supervisors, 12 staff, 2 clinic. Dentist: 1 part time. Visiting housekeepers: 3. Clerical assistants: 5. Volunteer workers: 3.
6. Type of work: The work of the commission deals with children from infancy to adolescence, as well as with adults. Home visiting, clinics and health centers are maintained.
7. Financial: The budget for the year was approximately \$75,000. The commission is supported by contributions from Massachusetts, the Dominion of Canada and Nova Scotia.
8. General statement: Public health visits made to homes of those attending clinics, 25,209. Public health visits, families not patronizing clinics, 8,085. Total, public health visits 33,294.

The public health visits being in the following services:

Prenatal .....	538
Child welfare .....	9,334
Dental .....	2,947
Nutrition .....	1,294
Posture .....	123
Eye .....	148
Ear, nose, throat .....	4,437
Skin .....	282
Special .....	118
Clinic, tuberculosis .....	4,497
Private, tuberculosis .....	2
Non-clinic .....	8,085
Old visits .....	30,362
New visits .....	1,911
Cooperative .....	400
Miscellaneous .....	476

Total calls .....	33,294
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## PROVINCE OF ONTARIO

### THE BABIES' DISPENSARY GUILD

#### Hamilton

1. Organized 1911.
2. Aim: The charter of the guild provides for any effort to reduce infant mortality or advance child welfare.
3. Board: The guild is governed by a board of directors, with an auxiliary medical board, also a women's board, controlling material relief and supplying voluntary aid for actual work.

4. Territory: The guild serves an urban territory with a population of approximately 110,000.

5. Staff: Supervisor of the guild. Field workers: 5. Doctors: 12 part time, each of whom give from 1 to 2 hours per conference, 9 alternates to fill vacancies. Volunteer workers: 6 in active service and 6 alternates, giving from 2 to 3 hours per conference. Clerical assistant: 1.

6. Type of work: The work includes weekly prenatal clinics and follow-up visits for supervision and instruction in general care. Child Welfare: Weekly conferences for children up to two years of age in four depots, semi-weekly in one depot and a central station with a daily conference.

7. Financial: The total budget was \$12,033.83. The organization is supported by membership fees and an appropriation from the city. No fees are charged for services.

8. General statement: The outstanding advancement for the year has been the establishment of a prenatal clinic, reaching 75 per cent of free ward hospital patients. An interesting undertaking was a "Refresher Course" in Pediatrics for physicians.

## DEPARTMENT OF PUBLIC HEALTH, CHILD HYGIENE SECTION

### Toronto

1. Organized 1912.

2. Aim: To conduct hygiene and preventive work—all types.

3. Board: The governing board consists of 4 men and 1 woman.

4. Territory: The work of the organization covers both urban and rural territory with a population of 522,866.

5. Staff: The staff of the Department of Public Health consists of a medical officer of health, a deputy medical officer of health, a director of child hygiene work, a director of public health nursing. Nurses: 14 supervisors, 97 staff. Dentists: 1 director, 27 part time, 25 assistants. Social Service: 1 director, 5 workers. Clerical assistants: 18. A varied number of volunteer workers.

6. Type of work: The organization does generalized public health nursing including school, pre-school, infant hygiene and prenatal. Clinics, classes and home visiting are conducted.

7. Financial. The organization is supported by a city appropriation. No fees are charged.

8. General statement: The infant mortality rate for the year was 86.4, (corrected for 15% incomplete registrations, 73.5).

## ONTARIO PROVINCIAL BOARD OF HEALTH

### Toronto

1. Organized April 1916 — Reorganized June 1920.

2. Aim: Organized for the following purposes:

(1) Ultimate: Education of the people in public health, particularly in child hygiene.

(2) Immediate: By actual demonstration, helping municipalities to help themselves, also, in unorganized sections to undertake a public health nursing service in so far as possible.

4. Territory: The board serves the province, which has an urban territory with a population of 1,335,000 and a rural territory with a population of 1,665,000.

5. Staff: A director. A medical supervisor, who is a pediatrician. Nursing service: 1 director, 1 supervising nurse, 17 staff nurses. Clerical assistants: 2.

6. Type of work: The work in local centers is for demonstration purposes.

7. Financial: The total budget for the year was \$90,000. The board is supported by an appropriation from the province.

8. General statement: The Provincial Department of Education has control of the school work.

## PUBLIC HEALTH NURSING DIVISION, DEPARTMENT OF PUBLIC HEALTH

## Toronto

1. Organized: Public Health Nursing was begun with a tuberculosis nurse in 1907, child hygiene work was begun in 1912.

2. Aim: To teach hygiene and to carry on preventive health work—all types.

3. Board: The governing board consists of 4 men and 1 woman, the Local Board of Health: the mayor, the medical officer of health and 3 aldermen, one of whom is a woman.

4. Territory: The work of the division covers an urban territory with a population of approximately 530,000.

5. Staff: A medical officer of health, a deputy medical officer of health, a director of child hygiene, a director of nursing division, a director of dental service, a director of social service. Doctors: 9 full time, 29 part time. Nurses: 14 supervisors, 97 staff. Dentists: 27 part time. Social workers: 5. Clerical assistants: 18. Volunteer workers: 2 or 3 for each of the 27 clinics.

6. Type of work: Home visiting, clinics and classes for infants, children, maternity and prenatal patients. Bedside care of infants and young children and occasionally miscellaneous care as a means to an end is given.

7. Financial: The division is supported by an appropriation from the city. The total estimated budget for the current year is:

General administration .....	\$52,806.78
Medical, dental and quarantine.....	163,500.16
Public health nursing .....	251,604.91
Laboratory .....	67,943.58
Isolation .....	151,367.49
Records .....	14,345.08
Food control .....	37,564.00
Sanitation .....	96,068.00

8. General statement: Infant mortality rate per 1,000 registered births was 86.4: Corrected for 15% incomplete registration of births was 73.5.

## PROVINCE OF QUEBEC

## CHILD WELFARE ASSOCIATION OF MONTREAL

## Montreal

1. Organized 1917.

2. Aim: Organized for the purpose of keeping well babies well, and the dissemination of child hygiene measures.

3. Board: The governing board consists of 12 men and 16 women.

4. Territory: The association serves an urban territory with a population of approximately 250,000.

5. Staff: An executive secretary, who is a registered nurse and who also supervises the nursing service. Doctors: 13 part time. Nurses: 12 staff. Clerical assistant: 1.

6. Type of work: The work includes home visiting, clinics and health centers for prenatal patients and infants, as well as clinics and health centers for pre-school children. Since the work in fourteen of the Baby Health Clinics is confined to preventive and educational measures, only minor ailments are treated and feedings adjusted. Cooperation with hospitals and family physicians is established for all other treatments.

7. Financial: The total budget for the year was \$22,000. The association is supported by the Provincial Government, City Government, and voluntary contributions.

8. General statement: In January 1922 there was an amalgamation with ten of the local Health Centers. Prenatal clinics have been introduced into three of these centers. The first half of the past year has called for a large amount of reorganization and the establishment of cooperation, not only with the City Department of Health and the Provincial and Dominion authorities, but also with all local Child-Caring Agencies.

## CHINA

### COUNCIL ON HEALTH EDUCATION

#### Shanghai

The Child Hygiene work has made rapid progress in China during the past year. The work for infants and pre-school children is carried on in Children's Health Conferences, Children's Health Clinics and Mothers' Clubs; the work for school children includes health supervision of school children and health education for the child himself. A trained child hygiene worker on the Council on Health Education keeps in touch with the various centers and directs the development. As a result of a Children's Health Conference held in Changsha last November, the first Children's Health Clinic in China was established. Similar clinics are being organized in Hongkong and Hangchow. A Maternity and Child Welfare Center is being established in Peking. In Foochow the work is being taken up in Mothers' Clubs in churches and is being conducted along much the same line. In Shanghai a Children's Health Clinic is being organized with a visiting nurse to follow up the work in the home. Last May three hundred and thirty children were examined in the Practice School of the Second Provincial Normal School of Kiangsu in Shanghai. A set of posters with a record book to encourage formation of health habits has been prepared. The Council of Health Education has prepared baby welfare charts and baby welfare exhibits.

## COLORADO

### COLORADO CHILD WELFARE BUREAU

#### Denver

1. Organized 1919.
2. Aim: To secure a wiser and better trained parenthood and to cultivate such healthy and happy childhood as shall insure the development of an ideal citizenship for the state.
3. Board: The governing board consists of 2 men and 3 women.
4. Territory: The work of the bureau covers an urban territory with a population of 256,369 and a rural territory with a population of 550,000.
5. Staff: An executive secretary, educational director, supervisor of nurses, one clerk.
6. Type of work: The bureau acts through all organizations for better parenthood; placing children where they may receive proper care physically and mentally.
7. Financial: The total budget for the year was \$4,000. The bureau is supported by the state.

### DENVER TUBERCULOSIS SOCIETY

#### Denver

1. Organized October, 1917.
2. Aim: To control and prevent the spread of tuberculosis.
3. Board: The governing board consists of 22 men and 14 women.
4. Territory: The work of the society covers an urban territory with a population of 256,369.



5. Staff: An executive secretary. Nutritional service: 1 supervisor. Clerical assistants: 2.

6. Type of work: The work includes home visiting and classes for school children. The Modern Health Crusade is in its fourth year in the Denver schools. The work includes the weighing and measuring of children, with considerable emphasis upon the correction of physical defects and the maintaining of good nutrition.

7. Financial: The budget for the year was approximately \$17,000. The society is supported by the sale of Christmas Seals and the community chest.

8. General statement: The open air school in Denver conducted during five months of spring in 1922 under the auspices of the Denver Tuberculosis Society and the School Board was very successful in its results. Twenty-five children who were largely from homes in which there was tuberculosis made an average gain of 7 pounds each. Their physical condition is much improved. The results in the other 2 nutrition classes are also interesting although not such intensive follow-up work was done as with the open air school children. In these 2 nutrition classes the actual gains were respectively 139 per cent and 145 per cent of the expected gain. In the open air school the actual gain was 206 per cent of the expected gain. Our health demonstration in the schools has attracted considerable attention and we feel that valuable results will come from it.

## CONNECTICUT

### CONNECTICUT ORGANIZATION FOR PUBLIC HEALTH NURSING

#### Canaan

1. Organized February 7, 1906.

2. Aim: The organization was formed to stimulate interest in the establishment and extension of Public Health Nursing in the state, and to bring women engaged in public health work into closer relationship with one another.

3. Board: The governing board consists of 10 women.

4. Territory: The work of the organization covers the state.

7. Financial: Supported by membership dues.

8. General statement: The organization is composed of nurses employed by the Public Health Nursing Association. There is a lay members' section, the membership of which comprises the lay people directing Public Health Nursing Service which engages in child welfare work. Forty-six nursing associations are represented in this membership, 135 public health nurses constitute the remaining membership. The meetings are held three times a year, and the program includes the study of the various phases of child welfare.

### DEPARTMENT OF PUBLIC CHARITIES

#### Bridgeport

1. Organized 1836.

2. Aim: Organized for the purpose of caring for the poor of the city.

3. Board: The governing board consists of 3 men and 1 woman.

4. Territory: The work of the department covers an urban territory with a population of 148,152.

5. Staff: A supervisor of the department. Nurses: 3 district, 10 institutional. Social workers: 8. Clerical assistants: 15.

6. Type of work: The work includes: Care of sick; care of dependent children; care of dependent families; supervision of tuberculosis prenatal cases attending clinic.

7. Financial: The total budget for the year was \$297,000. The department is supported by public funds.

## BABIES HOSPITAL HEALTH STATIONS

### Hartford

1. Organized 1905.
2. Aim: To reduce the infant mortality rates and to improve the health of children.
3. Board: The governing board consists of 3 men and 2 women.
4. Territory: The stations serve an urban territory with a population of approximately 146,462.
5. Staff: Superintendent of the stations. Medical director: 1. Nurses: 1 supervisor, 10 staff. Nutritionist: 1. Clerical assistant: 1. Volunteer workers: 6.
6. Type of work: The work of the stations include home visiting, clinics and classes for pre-school children, as well as home visiting and clinics for infants and prenatal patients.
7. Financial: The stations are supported by special contributions.
8. General statement: In June, 1922, the Babies Hospital Health Stations became a department of the Visiting Nurse Association.

## BUREAU OF CHILD HYGIENE, STATE DEPARTMENT OF HEALTH

### Hartford

5. Staff: Director of the bureau. Doctors: 1, appointed since the first of the year. Director of Public Health Nursing, 1 field nurse. Supervisor of midwives. Clerical assistants: 5.
6. Type of work: The bureau has assisted in the registration of births and has stimulated the development of prenatal nursing; has developed Well Baby Conferences and has conducted Child Health Contests.
7. Financial: The bureau is financed by the state.
8. General statement: Continuous effort is being made to get localities to install Public Health Nurses on their own account through whom the development of the Child Hygiene program may be carried out. Prenatal letters have been prepared and are being distributed. Literature and diet cards have been printed and supplied to all associations.

## UNION FOR HOME WORK

### Hartford

1. Organized 1872.
2. Aim: Organized for the relief of all kinds of suffering and for the physical, intellectual and spiritual elevation of the women and children.
3. Board: The governing board consists of 4 men and 14 women.
4. Territory: The union serves an urban territory with a population of 146,462.
5. Staff: Superintendent, 3 assistants. Nursery matron: 1, 9 helpers. Janitor, house cleaners and helpers.
6. Type of work: The union maintains a relief department, a day nursery, a dry goods department, a laundry, as well as clubs and classes.
7. Financial: The budget for the year was approximately \$24,000. The union is supported by an income from investments and private donations.
8. General statement: Wherever possible the union furnishes work of some kind instead of giving gratuitous relief. This accounts for the dry goods department, as the women make up aprons, towels, cotton goods, fancy work, etc.; also in the laundry the women are taught to do laundry work and are placed in private families. The Day Nursery is a member of the National Federation of Day Nurseries.

## ALUMNAE ASSOCIATION OF THE CONNECTICUT TRAINING SCHOOL FOR NURSES, INC.

### New Haven

1. Organized January 6, 1891.
2. Aim: To make of the association an active participant in the welfare of the community.
3. Board: The officers of the association shall consist of a president, a first and second vice-president, a secretary, a treasurer, an assistant treasurer and five councillors.
7. Financial: The association is supported by membership dues and fees.

## CONNECTICUT CHILDREN'S AID SOCIETY, NEW HAVEN BRANCH

### New Haven

1. Organized 1918.
2. Aim: Organized to care for dependent children.
3. Board: The governing board consists of 7 men and 11 women.
4. Territory: The work of the society covers both urban and rural territory.
5. Staff: Field workers: three. Clerical assistant: one.
6. Type of work: The placing and supervision of children in carefully selected foster homes.
7. Financial: The total budget for the year was \$15,000. The society is supported by private contributions.
8. General statement: The society is a non-sectarian organization, offering advice and assistance in any case involving child care.

## CRIPPLED CHILDREN'S AID SOCIETY, INC.

### New Haven

1. Organized January 14, 1914, incorporated December 21, 1914.
2. Aim: Organized for the relief of crippled children by affording them material assistance in providing medical and surgical care, in supplying orthopedic appliances and in providing such means of hygienic and social betterment as may tend to remove the handicap to the children's welfare and happiness which their unfortunate situation has imposed.
3. Board: The society is governed by a board of 13 men, as trustees, and an executive board of 17 women.
4. Territory: The work of the society is carried on in New Haven and out-lying districts.
5. Staff: There are no paid executives, the services of the managing board being voluntary. The medical board consists of two doctors, one of whom is in charge and doing active work. The physician who is supervisor of medical service, whose services are voluntary, gives about seven hours weekly to the care of these children. A registered nurse is in charge of the nursing service, with one paid assistant.
6. Type of work: The work is orthopedic and covers clinics (weekly), social, hospital and home nursing, advisory care and corrective exercises classes.
7. Financial: The total budget for the year was \$11,000.00. The society is supported by the community chest and membership dues. The care of the children is free, except where the parents can contribute a small payment to the society.
8. General statement: The most interesting work done by the society during the past year has been in helping four children of school age who have never attended because so badly crippled. Operations were performed and proper orthopedic appliances, supplied by the society, help the children to get around and attend school regularly. Special provisions to be made are a home for convalescent cases and a bus to convey the children to and from school.

# NEW HAVEN HEALTH CENTER

## New Haven

1. Organized April, 1920.

2. Aim: Organized for an intensive public health effort in a local area, under favorable conditions of cooperation, centering in a local headquarters.

3. Board: The board consists of 16 men and 4 women. The center is under the joint control of the Board of Health, Visiting Nurse Association, New Haven County Chapter of the American Red Cross and New Haven Medical Association.

4. Territory: The center serves an urban territory with a population of 27,000, which constitutes one-sixth of the population of the city.

5. Staff: Directors: 2. Doctors: 1 full time, 3 part time. Nurses: 2 supervisors, 8 staff. Nutritionists: 1 part time. Clerical assistant: 1. Volunteer workers: 2.

6. Type of work: Clinics and health centers are maintained for prenatal patients, as well as for infants and pre-school children. The educational activities are stressed to the utmost.

7. Financial: The budget for the year was \$15,700. The center is supported by an appropriation from the city and by the community chest. In addition to this budget, nursing service has been received from the Visiting Nurse Association amounting to \$15,000, four personnel from the Department of Health amounting to \$5,600. No fees are charged at the center.

8. General statement: A local advisory council composed of thirty representative citizens links the center to the community. No treatment is given except first aid. Patients are referred to local physicians, dispensaries and hospitals for further treatment.

# NEW HAVEN ORPHAN ASYLUM

## New Haven

1. Organized February 18, 1833.

2. Aim: To provide a home for orphans, half orphans and destitute children.

3. Board: The governing board consists of 1 man and 55 women.

4. Territory: The Asylum serves an urban territory with a population of approximately 162,000.

5. Staff: A superintendent; supervisor of medical service. Social service: 1 supervisor, 1 worker. Clerical assistant: 1.

6. Type of work: The work of the Asylum includes specialized care of dependent children in the institution; placing of children for adoption under supervision; placing of children in free or foster homes under supervision; placing of children in boarding homes in special cases; maintaining tuberculous children at Wallingford Sanatorium; mentally defective children at Mansfield Training School; assisting boys and girls of promise through high school, trade school, Mt. Hermon School and College; boarding out babies under three in private homes, supervised by a trained nurse; rehabilitation of the child's own home whenever possible; giving advice and assistance to parents and relatives; placing in homes and supervising Connecticut children for the Mt. Carmel Children's Home Association, the entire expense being cared for by the Mt. Carmel Children's Home.

7. Financial: The budget for the year was \$68,577. The Asylum is supported by interest on endowments, appropriation from public funds and contributions.

8. General statement: Every child on admission to the Asylum is examined by the attending physician. Cases needing special examination are referred to different specialists. Mental tests are given at the Yale-Psycho Clinic to every child being placed on probation for adoption and to all others who seem in any way abnormal or difficult. All cases of contagious diseases and operations are cared for in hospitals of the city. A Baby Welfare Clinic is held every other week by the consulting pediatricians.

## NEW HAVEN VISITING NURSE ASSOCIATION

## New Haven

1. Organized 1905.
2. Aim: To promote health, to care for the sick in their homes, to teach health habits, home hygiene and preventive medicine.
3. Board: The governing board consists of 36 women.
4. The association serves an urban territory with a population of 162,390.
5. Staff: A superintendent. Doctors: 10. Nurses: 1 director, 10 supervisors, 38 staff. Nutrition service: 1 director, 5 workers. Clerical assistants: 6. Volunteer workers, 2.
6. Type of work: Home visiting, clinics, classes and health centers are maintained for the pre-school child. Home visiting and health centers are maintained for maternal, prenatal, obstetrical and postnatal patients, as well as for infants and children. Preventive and educational work is stressed.
7. Financial: The total budget for the year was \$109,000. The association is supported by an appropriation from the state, special contributions and the community chest. A fee of eighty-five cents per visit is charged if the patient can pay.
8. General statement: The report is for the whole association. The Child Welfare Department is being absorbed into the generalized program and it is impossible to give an exact report for the year. The association is the largest public health association in the city, doing all of the work in the homes and covering the whole of New Haven and West Haven. The association provides skilled nursing care for the sick in their homes. The nurse gives the necessary instruction to the family regarding the patient and teaches hygiene, thus saving the individual and the community from the results of ignorance and neglect. The association conducts 16 well-baby conferences and 10 conferences for the pre-school children, in this way helping to protect the child life of the city.

## YALE PSYCHO-CLINIC

## New Haven

1. Organized 1911.
2. Aim: To develop the diagnostic, advisory and research phases of the work of the clinic.
3. Board: The clinic is a part of Yale University Polyclinic at the New Haven Dispensary.
4. Territory: The services of the clinic are not restricted to New Haven, but are available to any persons or agencies in the state.
5. Staff: The director of the clinic is also professor of Child Hygiene in the Graduate School; there is one Clinical and Research assistant.
6. Type of work: The activities of the clinic fall into three divisions.
  1. The Diagnostic and Consultation service.
  2. The Field Work.
  3. Research.
7. Financial: The clinic is supported by the University, no fees are charged except for field work.
8. General statement: The diagnostic and consultation work of the clinic is conducted at the New Haven Dispensary and psycho-clinical laboratory. About 200 children and youths have, during the year, been referred for mental diagnosis and advice as to treatment and social disposition. With few exceptions the cases referred are problem cases, involving dependency, defect, delinquency, or some form of educational adjustment. County Home children are by law referred to the clinic for examination before commitment. Records of all examinations are kept on file. Recommendations are ordinarily made through conference followed by report or letter.

The major field work of the year has been a mental survey of retarded pupils in the Bridgeport Public Schools. This undertaking involved 364 individual examinations. A report of the findings with recommendations has been made to the Bridgeport Board of Education. A group of special cases has been investigated for the New London Public Schools; and a group of subnormal pupils at Southington, Connecticut.

A mental survey of the New Haven Elementary Schools to determine the number and status of mentally subnormal and otherwise handicapped children has been made. The results of this survey with a report of recommendations has been published by the Yale University Press in a volume entitled, "Exceptional Children and Public School Policy". (1921).

## WATERBURY VISITING NURSES ASSOCIATION

### Waterbury

1. Organized 1903.

2. Aim: To care for the sick and to teach hygiene and child care by actual demonstration in the home.

3. Board: The governing board is formed of a board of directors, comprising 11 men; and an executive committee, comprising 2 men and 6 women.

4. Territory: The association serves an urban territory with a population of approximately 91,416.

5. Staff: Superintendent. Doctors: 11 part time. A supervisor of child welfare and prenatal work. Nurses: 10 staff.

6. Type of work: Prenatal work is done through home visiting and a weekly clinic. Postnatal, bedside care and instruction are given to patients who have been attended by a physician. Infants are kept under supervision through home visiting until they are two years old. Six Infant Welfare Conferences are held in five sections of the city each week. One Pre-school Conference has been opened this year and all children are referred to that when they are dismissed from home supervision. Three "Little Mothers' League" classes covering a course of 12 lessons are conducted. Educational window exhibits are prepared every 6 weeks or 2 months at 2 of the Baby Welfare Stations by the student nurses from the Waterbury Hospital, who come to the association for experience. Cases of communicable disease and of tuberculosis are given bedside care when necessary.

7. Financial: The budget for the year was \$26,000. The association is supported by an endowment fund, by fees and by special contributions.

8. General statement: In April a Pre-school Conference was opened at the Kingsbury Day Nursery. Forty-one children were registered during the first 5 months and 53 visits were made. A vacation home is maintained during the summer for mothers and babies.

## DELAWARE

### CHILD WELFARE COMMISSION

#### Wilmington

1. Organized April 10, 1921.

2. Aim: To take over, and further develop the child welfare activities conducted by the Reconstruction Commission of the State of Delaware; to maintain a Traveling Child Health Center to serve the sparsely settled sections of the state; to cooperate with state, county and local official bodies in the development of such child welfare work as the commission may believe will materially advance the interests of the children of the state; to make every reasonable preparation to transfer various branches of its work as rapidly as possible to appropriate state agencies; to make a study of the needs of children a definite part of its work, and

to make recommendations for executive and legislative action in matters relating to children.

3. Board: The governing board consists of 4 men and 5 women.

4. Territory: The work of the commission covers both urban and rural territory, with a total population of 244,000.

5. Staff: Doctors: 1 director, 24 part time. Nurses: 3 supervisors, 22 staff. Dentists: 3 part time, 1 supervisor, 3 dental hygienists. Clerical assistants: 5. Members of Catholic Daughters of America and the Junior League are volunteer workers.

6. Type of work: The commission has to do with all matters pertaining to child welfare with the possible exception of the Juvenile Court. Home visiting, clinics, classes and health centers are maintained. A dental mobile unit is conducted.

7. Financial: The budget for the year was \$60,000. The commission is supported by an appropriation from the state.

8. General statement: In the city regular visits to the center are required. They vary from 2 weeks to 1 month for each case, though special cases are required to come more frequently. In rural work this scheme is not possible. The frequency with which the nurse visits these families is dependent on the weather and roads. All nurses whether rural or urban must put in at least one-third of their time on prenatal, infancy and pre-school child work, with the emphasis on the prenatal and infancy groups. The visits of the nurses are instructive and educational. Home care is given only in emergency. Cases needing special care are referred to the hospitals.

## DISTRICT OF COLUMBIA

### CHILD WELFARE SOCIETY

#### Washington

1. Organized 1901—incorporated 1914.

2. Aim: Conservation of child life through the education of parents.

3. Board: The governing board consists of 1 man and 47 women.

4. Territory: The society serves an urban territory with a population of 437,571.

5. Staff: Doctors: 1 medical director, 9 part time. Nurses: 1 supervisor, 8 staff. Dentists: 1 supervisor, 17 part time.

6. Type of work: The society establishes and conducts centers where prenatal instruction is given by physicians and nurses; mothers are taught how to care for the well baby and child; it instructs mothers in modification of milk, feeding, bathing and home sanitation; when necessary it secures homes for babies and children, wet nurses and part time work for mothers.

7. Financial: The total budget for the year was \$30,446.05. The society is supported by the federal government, private subscriptions and entertainments.

8. General statement: The statistical report indicates that 6,001 individuals have received preventive supervision, an increase of 229 over the year preceding; and that 27,001 home visits have been made by the nursing staff, an increase of 419.

### PROVIDENCE HOSPITAL DAY NURSERY

#### Washington

1. Organized 1908.

2. Aim: To assist working women, badly cared for and ill fed children.

3. Board: The governing board consists of two women.

4. Territory: The children of the nursery come mainly from the southeast section of Washington.

5. Staff: The Sisters of Charity of Providence Hospital are in charge; field workers and nurses of the Hospital Training School.

6. Type of work: Prenatal and obstetrical work is done in the dispensary clinics. Clinics for infants and children are held three times a week. Health and nutrition classes are conducted at the Day Nursery. Home visits are made by the staff. Craft work is taught in the kindergarten.

7. Financial: The nursery is supported by a small endowment, the Ladies of Charity, fees, entertainments and donations.

8. General statement: Dinner is served to the children of the Parochial School.

## HAWAIIAN ISLANDS

### ALEXANDER HOUSE SETTLEMENT ASSOCIATION

#### Wailuku Maui

1. Organized 1901.

2. Aim: To carry on various branches of social service in the county of Maui.

3. Board: The governing board consists of 6 men and 5 women.

4. Territory: The work of the settlement covers both urban and rural territory, with a population of 37,500.

5. Staff: Head worker and assistant. Social service: 1 supervisor, 7 workers; 1 staff nurse.

6. Type of work: The whole field of social work is covered, including industrial, probation, child welfare, mothers' pensions, gymnasium, athletics, club work and various community services.

7. Financial: The budget for the year was \$23,400. The settlement is supported by private contributions.

8. General statement: The district nursing work has included not only treatment for various cuts, bruises, pink eye, etc., but has also included talks to older girls and instruction and demonstration to Girl Scout troops. The statistics of the work are as follows:

Dispensary cases .....	2,493
House visits .....	2,458
Hours at dispensary office.....	224
Kindergarten treatments .....	509
School room visits .....	136
School treatments .....	3,332

## ILLINOIS

### CHICAGO LYING-IN HOSPITAL AND DISPENSARY

#### Chicago

1. Organized February, 1895.

2. Aim: To provide medical and nursing care to women at time of confinement, also, to instruct doctors, students and nurses in the art of obstetrics.

3. Board: The governing board of the hospital consists of 4 men and 28 women.

4. Territory: The hospital serves an urban territory with a population of 2,701,212.

5. Staff: Superintendent of the hospital and a superintendent for each of the branches of the hospital. Doctors: 1 director of obstetrical service, 15 full time, 26 part time. Nurses: 1 director of obstetrical service, 12 supervisors, 7 staff, 53 pupils. Social service: 1 director, 3 full time, 3 part time. Volunteer service: 3.

6. Type of work: Home visiting, clinics and research work is carried on in addition to the regular hospital work.



7. Financial: The budget for the year was \$272,859.17. The hospital is supported by membership dues and special contributions. Fees are regulated for each patient.

8. General statement: During the year 4,289 patients visited the clinic; 18,724 home visits were paid by the staff; 1,673 patients were given home care; 3,085 patients received hospital care. The infant mortality rate was 1.81 per cent. The age limit is 18 months.

### CHICAGO WOMAN'S CLUB

#### Chicago

1. Organized February, 1876.
2. Aim: Organized for educational, civic and philanthropic purposes.
3. Board: The governing board consists of 24 women.

### ELIZABETH McCORMICK MEMORIAL FUND

#### Chicago

1. Organized May 20, 1908.
2. Aim: To improve the condition of child life in the United States.
3. Board: The board of trustees consists of 6 men and 2 women.
4. Territory: The organization serves the entire United States.
5. Staff: Director. Doctors: 4 consultant doctors, 2 staff, 3 part time, 3 full time (free service). Nutrition service: 1 director, 5 full time. Clerical assistants: 2.
6. Type of work: The activities of the organization have been concentrated on promoting the health of children. It maintains a national directory of open air schools, furnishes information on methods, equipment, and construction with a view to standardizing open air schools throughout the country. It is also carrying on a series of investigations in ventilation of school buildings. Conducting experiments and demonstrations to show what one well qualified health supervisor can accomplish for child health. The demonstration for undernourished children has been carried on chiefly through nutrition classes.
7. Financial: The total budget for the year was \$79,317. The organization is supported by an endowment.
8. General statement: Members of the staff of the Fund have directed courses of study at normal schools and colleges and state universities and have assisted local communities in planning and starting health service for children. The Fund has conducted some short courses, so that trained workers with good educational background might gain a comprehension of the methods of the nutrition class, and that dietitians and social workers might have some idea of the necessity for a sound medical background for all such work. The Fund has never employed nor recommended workers on the basis that such short courses constitute complete training as "nutrition workers." The Fund cooperates locally with a number of organizations such as the United Charities, Chicago Tuberculosis Institute and the Children's Institutes in planning their health service for children. The Fund also maintains a Speakers' Bureau, a Library Service, loans exhibit material on Open Air Schools and Child Health and Nutrition and is a distributing center for child welfare literature.

### INFANT WELFARE SOCIETY OF CHICAGO

#### Chicago

1. Organized 1910.
2. Aim: The object of the organization is to keep babies well by advice, by supervision, by encouraging breast feeding and by instruction of the mothers in the rules of hygiene.

3. Board: The governing board consists of 17 men and 13 women.
4. Territory: The society serves an urban territory.
5. Staff: Superintendent. Doctors: 1 director, 27 full time. Nurses: 4 supervisors, 39 staff. Nutrition service: 1 supervisor, 6 full time. Clerical assistants: 2.
6. Type of work: Conferences, nutrition clinics and prenatal clinics are conducted. Twenty-eight stations are maintained. The mother is instructed as to the nursing of her child, when breast feeding is impossible an adequate milk modification is prescribed.
7. Financial: The budget for the year was \$125,000. The society is supported by private contributions.
8. General statement: Infant Welfare Conferences are held twice a week in the 27 centers, 2 of which were opened during the past year. Nutrition classes are conducted weekly in 12 stations and in 5 stations prenatal clinics are held weekly.

### MOTHERS' AID OF THE CHICAGO LYING-IN HOSPITAL AND DISPENSARY

Chicago

1. Organized 1904.
2. Aim: To be of all assistance possible to the work of the Chicago Lying-in Hospital and Dispensary.
3. Board: The governing board consists of 40 women.
6. Type of work: The organization maintains one or more wards in the Chicago Lying-in Hospital to be known as the "Mothers' Aid Sewing Club Ward;" it provides the institution with mothers' and babes' wearing apparel; lends assistance to poor women in the state of pregnancy, and furthers the charitable and educational purposes of the institution.
7. Financial: The organization has an income from membership dues, initiations, life memberships and the various funds.
8. General statement: A room has been endowed in the hospital to be known as "My Mother Fund" room. Mothers' Aid members give their services in times of distress to the hospital, making practically all the supplies used by the Lying-in and Pavilion in all departments, thereby making it possible to keep at work one or more floors which otherwise would have been obliged to close.

### THE STEWART RIDGE MOTHERS' CLUB

Chicago

The Club was organized about 11 years ago for the purpose of teaching and helping mothers, and improving the general welfare of the community. The Club is supported by dues from members.

### CHILD WELFARE SOCIETY

Freeport

1. Organized February, 1918.
2. Aim: Child welfare, dealing with the period from prenatal life to school age.
3. Board: The governing board consists of 14 women.
4. Territory: The society serves an urban territory with a population of 19,669.
5. Staff: One supervising nurse.
6. Type of work: Visits and advises mothers in care and feeding of children of pre-school age; gives prenatal care; maintains weighing station, urging mothers to have their children weighed once each month; gives instruction: class of kindergarten, class of "Little Mothers Leaguers" (girls from 12-14 years), class of

young mothers. A Tri-County Orthopedic Clinic is conducted, with follow-up work by nurses.

7. Financial: The total budget for the year was \$4,500. The society is supported by membership dues, an appropriation from the city and an annual drive.

8. General statement: The Child Welfare Society is one department of a Civic Center, which includes the health and social agencies of the county.

### CHILD WELFARE COMMITTEE OF KNOX COUNTY CHAPTER OF AMERICAN RED CROSS

#### Galesburg

1. Organized December, 1920.

2. Aim: To conduct child welfare conferences in 12 centers throughout the county; a day nursery and a crippled children's clinic.

3. Board: The governing board consists of 14 women.

4. Territory: The work of the committee covers an urban territory with a population of 23,800, and a rural territory with a population of 16,541.

5. Staff: An executive secretary. A supervisor of medical service. Doctors: 12 part time. A registered nurse in charge of the nursing service. Dentists: 2 part time. Clerical assistants: 1 at each center. Volunteer workers: 2 or 3 at each center.

6. Type of work: Health centers, hospital and clinics are maintained for the pre-school child. Special attention is given to visual, dental, and orthopedic work. Home visiting for maternity, prenatal cases, and infants is carried on.

7. Financial: The total budget for the year was \$3,913. The committee is supported by the Red Cross, Knox County Chapter; appropriations from the city and special contributions.

8. General statement: The Red Cross Nurse Clinics are for children of pre-school age (weekly). There is complete cooperation with the city medical group, all of their services are volunteer.

The infant mortality rate for 1920, 84 per 1,000.

The infant mortality rate for 1921, 42 per 1,000.

Number of children examined during year, 1,469.

Largest number of children attending conference for any one month, 175.

Smallest number attending, 54.

Underweight who gained, 112, or 84.2 per cent.

Underweight who lost, 15, or 11.3 per cent.

At the Crippled Children's Clinics 75 per cent of the children treated showed marked improvement.

### EMMA MATTIESSEN-CHANCELLOR MEMORIAL INFANT WELFARE STATION

#### La Salle

1. Organized 1912.

2. Aim: The general care and supervision of babies under two years of age; nursing care of the sick babies; general instruction and prenatal care to mothers.

3. Board: The governing board consists of 5 men.

4. Territory: The station serves La Salle, Peru and Oglesby, Illinois.

5. Staff: Director of the Hygiene Institute and an infant welfare nurse.

6. Type of work: Three conferences are held weekly. Milk tickets are distributed to the needy cases, all who can, pay a small weekly sum.

7. Financial: The total budget for the year was \$2,000. The station is supported by the Hygienic Institute.

**CITY HEALTH DEPARTMENT, BUREAU OF CHILD HYGIENE**

**Springfield**

1. Organized February, 1916.
2. Aim: To reduce infant mortality.
4. Territory: The work of the bureau covers an urban territory.
5. Staff: Doctors: 6 (free service). Nurses: 1 supervisor, 3 staff. Volunteer service: 2.
6. Type of work: Home visiting for prenatal and postnatal patients, infants and pre-school children. Clinics are conducted for infants and pre-school children.
7. Financial: The budget for the year was \$7,000. The bureau is supported by the city, American Red Cross and contributions.
8. General statement: In addition to the regular child welfare work, 2,654 calls were made by the nurses during July and August, 1922, in a survey made by the city for whooping cough.

**INDIANA**

**CHILD WELFARE STATION, ELKHART CHAPTER, INDIANA LEAGUE OF WOMEN VOTERS**

**Elkhart**

1. Organized September, 1920.
2. Aim: To reduce infant mortality rate and increase health of coming generation by teaching the mother how to keep her child well.
3. Board: The governing board consists of 9 women.
4. Territory: The territory covered is urban with a population of 25,000.
5. Staff: Doctors: 2 part time (free service). Nurses: 1 supervisor, 1 staff. Nutrition service: 1 part time. Volunteer service: 12.
6. Type of work: Home visiting is offered prenatal patients, as well as infants and pre-school children. Health centers are maintained and educational and preventive work is conducted.
7. Financial: The organization is supported by the community chest, special contributions and the League of Women Voters.
8. General statement: All prenatal cases are reported to the State Division of Infant and Child Hygiene, which office sends follow-up literature to all expectant mothers. In September a substation was opened in the colored district.

**BABIES' MILK FUND ASSOCIATION**

**Evansville**

1. Organized 1912.
2. Aim: Infant Welfare, including prenatal, postnatal and pre-school care.
3. Board: The governing board consists of 5 men and 11 women.
4. Territory: The territory covered is both urban and rural with a combined population of 192,000.
5. Staff: Secretary. Doctors: 1 director, 17 part time (free service). Nurses: 1 supervisor, 2 general. Dentist: 1 part time. Volunteer service: 45.
6. Type of work: Clinics are conducted for maternal, visual, and orthopedic cases. Health centers are maintained.
7. Financial: The budget for the year was \$12,800. The association is financed by membership dues, appropriation from the city and county, and special contributions.
8. General statement: 3,462 patients visited the clinic during the year and 12,949 home visits were paid by the staff.

## INDIANA STATE BOARD OF HEALTH, DIVISION OF INFANT AND CHILD HYGIENE

### Indianapolis

1. Organized October, 1919.
2. Aim: The protection and preservation of the health of children.
3. Board: The governing board consists of 4 men and 1 woman.
4. Territory: The work of the division covers the entire state, which has an urban territory with a population of 1,304,468, and a rural territory with a population of 1,626,076.
5. Staff: Doctors: 1 director, 2 full time, 8 part time, 366 part time (free service). Nurses: 1 director, 2 supervisors, 3 staff. Dentists: 1 advisor, 60 part time. Social service: 1 director, 10 part time (free service). Nutrition service: 1 director, 8 part time (free service). Clerical assistants: 4. Volunteer service: 1,474.
6. Type of work: Clinics are conducted for adults as well as for infants and children. Rest rooms are provided for prenatal patients. A mobile unit, which covers the state, conducts clinics; dental work is included.
7. Financial: The division is supported by federal and state governments, the former contributing \$8,000 and the latter \$20,000.
8. General statement: An average of 10 health examinations by townships have been held in 22 counties. A total of 6,456 children have been examined during the first three quarters of the fiscal year. Home visits and follow-up work and the sending of children to hospitals has been cared for by local nurses and organizations. Local nurses also conduct prenatal clinics and give obstetric care.

## PUBLIC HEALTH NURSING ASSOCIATION OF INDIANAPOLIS

### Indianapolis

1. Organized January 4, 1913.
2. Aim: To give skilled nursing care in the home, to teach hygiene and to prevent illness.
3. Board: The governing board consists of 24 women.
4. Territory: The association serves an urban territory with a population of 335,260.
5. Staff: Nurses: 1 superintendent, 3 supervisors, 27 staff. A physician helps at the general clinic. Clerical assistants: 3. A large number of auxiliaries make surgical dressings.
6. Type of work: In addition to the regular visiting work weekly clinics are held for disease prevention. Health centers are maintained.
7. Financial: The total budget for the year was \$41,798.43. The association is supported by membership dues, donations and the community chest.
8. General statement: During the year a Health Teaching Center has been established. Follow-up work of the hospital and dispensary service has been developed. Prenatal and postnatal educational work has been extended to patients in their homes. The 7 nurses of the Children's Aid Association are supervised by the Public Health Nursing Association.

## CHILDREN'S DISPENSARY AND HOSPITAL ASSOCIATION

### South Bend

1. Organized May, 1909.
2. Aim: To dispense free treatment to children under 16 years of age whose parents are unable to pay a physician's fee; also, free treatment to prospective mothers.
3. Board: The governing board consists of 24 women.

4. Territory: The territory covered is urban with a population of 70,983.
5. Staff: Medical director. Doctors: 14 part time (free service). Nurses: 1 superintendent, 2 staff. Dentist: 1. Social workers: 1 full time, 2 part time. Clerical assistants: 6 part time. Volunteer workers: 12 part time.
6. Type of work: Home visiting and clinical service offered to prenatal, obstetrical and postnatal patients, infants and school children, to eye, orthopedic and dental patients.
7. Financial: The association is supported by the community chest.
8. General statement: The association cooperates with other agencies interested in child welfare.

## IOWA

### IOWA TUBERCULOSIS ASSOCIATION

#### Des Moines

1. Organized 1912.
2. Aim: The promotion of public health with special reference to tuberculosis.
3. Board: The governing board consists of 32 men and 26 women.
4. Territory: The work of the association covers the state, with a population of 2,403,603.
5. Staff: Doctors: 2 part time. Nurses: 1 supervisor, 2 staff. A director of the School Health and Modern Health Crusade. Clerical assistants: 3.
6. Type of work: The work of the association is educational: school and community health campaigns conducted, health crusade and occupational therapy established in sanatoria.
7. Financial: The budget for the year was \$12,000. The association is supported by the sale of Christmas Seals and fees. There is no charge for ordinary field visits.
8. General statement: The State Board of Health has appointed as Director of the Bureau of Public Health Nursing the association's Director of Nursing, thus approving the work of the association and giving it official support.

### IOWA CHILD WELFARE RESEARCH STATION

#### Iowa City

1. Organized 1917.
2. Aim: To investigate the best scientific methods of conserving and developing the normal child, disseminate the information acquired by such investigations and train students for work in such fields.
3. Board: The governing board consists of 5 men and 1 woman.
4. Territory: The station is conducted in connection with the State University. The state has a large rural territory.
5. Staff: Director. Collaborators: 11 special, 10 part time. Nurses: 3 supervisors. Social workers: 1 full time, 2 part time. Nutrition workers: 3 full time, 1 part time. Two workers in eugenics. Six workers in child psychology. Clerical assistants: 8.
6. Type of work: The work is largely research work with children from infancy to adult life and is carried on through the Research Station, home visiting, clinics and hospital work. Special work is carried on in nutrition, sociology, eugenics, psychology and anthropometry.
7. Financial: The budget for the year was \$49,000. The station is supported by the state and the National Woman's Christian Temperance Union.
8. General statement: The results of these scientific studies are published from time to time. Two of the most important being the "Physical and Mental Growth of Children."

**KEOKUK VISITING NURSE ASSOCIATION****Keokuk**

1. Organized January, 1913.
2. Aim: To provide skilled nursing care in the homes; to teach cleanliness and the proper care of the sick; to prevent the spread of disease and to provide such material aid as may be desirable.
3. Board: The governing board consists of 15 women
4. Territory: The association serves an urban territory with a population of 16,000.
5. Staff: Doctors: 6 part time (free service). Nurses: 1 director, 1 supervisor, 2 staff. Volunteer service: 4.
6. Type of work: Home visiting is conducted for adults, infants and children. Preventive and educational work is conducted.
7. Financial: The budget for the year was \$4,500. The association is supported by factory pledges, business houses, subscriptions, fees, coin banks, rummage sales, membership dues and the Metropolitan Life Insurance Company.
8. General statement: The number of patients given hospital care during the year was 1,087; the number of home visits made by the staff was 5,612.

**IDAHO****DEPARTMENT OF PUBLIC WELFARE, BUREAU OF CHILD HYGIENE****Boise**

1. Organized July 1, 1922.
2. Aim: The promotion of the welfare of maternity and infancy.
3. Board: The governing board consists of 4 men and 3 women.
4. Territory: The work of the bureau covers the entire state
5. Staff: Director. Nurses: 2. Clerical assistant: 1.
6. Type of work: The director has made a number of trips to different sections of the state planning and supervising the work, establishing a contact with the physicians of the community, giving lectures and assisting in the health conferences. The two nurses have given talks to groups of mothers throughout the state concerning the importance and necessity of proper prenatal care.
7. Financial: The total budget for the year was \$11,250. The bureau is supported by federal and state appropriations.
8. General statement: Fifteen counties have been visited by the staff, 64 mothers' meetings held and 3 Mother and Child Health Conferences held. In one community 112 children of pre-school age were examined, 8 of the local physicians assisted in the examinations and each mother was given a personal interview with the physician regarding the welfare of her child.

**KANSAS****WICHITA PUBLIC HEALTH NURSING ASSOCIATION****Wichita**

1. Organized February, 1919.
2. Aim: The benefit and assistance of those otherwise unable to secure skilled assistance in time of illness; to promote cleanliness and to teach proper care of the sick; and to establish and maintain one or more hospitals for the sick, or a home or homes for the accommodation or training of nurses.
3. Board: The governing board consists of 16 men and 11 women.
4. Territory: The association serves both urban and rural territory with a total population of 82,128.

5. Staff: Doctors: 9 part time (6 of whom are volunteer workers). Nurses 1 director, 1 supervisor, 10 Staff. Clerical assistant: 1.

6. Type of work: A great deal of preventive and educational work is done. Home visiting, clinics and hospital care are offered to maternal patients, infants and children. Health centers are maintained.

7. Financial: The total budget for the year was \$25,000. The association is supported by membership dues, contributions, appropriations and fees.

8. General statement: 9,870 visits were made by the staff during the year and 61 patients were given hospital care.

## KENTUCKY

### PUBLIC HEALTH NURSING ASSOCIATION

#### Louisville

1. Organized January 1, 1920.

2. Aim: To provide skilled nursing care for the sick in their homes and to decrease the infant mortality rate.

3. Board: The governing board consists of 4 men and 26 women.

4. Territory: The association serves an urban territory with a population of 234,891.

5. Staff: Superintendent. Doctors: 1 director, 16 part time. Nurses: 1 director, 3 supervisors, 23 staff. Clerical assistants: 3. Volunteer workers: 27.

6. Type of work: Clinics are conducted for maternity patients, infants and pre-school children. Classes are held for the school children. Home visiting is an important part of the work.

7. Financial: The total budget for the year was \$46,582.31. The association is supported by the community chest, appropriations, fees and income from the Metropolitan Life Insurance Company.

8. General statement: 35,692 visits were paid during the year; 128 patients were given hospital care. The infant mortality rate for infants under 1 year, is 16 per 1,000; from 2 to 6 years, is 8 per 1,000.

## LOUISIANA

### CHILD WELFARE ASSOCIATION OF NEW ORLEANS

#### New Orleans

1. Organized May, 1913.

2. Aim: To secure adequate medical and nursing care for every member of every family in need of such care.

3. Board: The governing board consists of 19 men and 8 women.

4. Territory: The association serves an urban territory with a population of 385,000.

5. Staff: Executive; director of infant welfare; director of maternity service. Doctors: 9 part time. Nurses: 1 supervisor, 28 staff. Dentists: 1 supervisor, 2 full time, 2 part time. Clerical assistants: 4. Volunteer workers: 208.

6. Type of work: Clinics are held for infants, pre-school children, prenatal, obstetrical and postnatal patients. Home visiting is another phase of the work.

7. Financial: The budget for the year was \$62,000. The association is supported by membership dues, an appropriation from the city and state, special contributions and fees.

8. General statement: During the year the maternity service gave complete care to 237 cases.



**MARYLAND****THE BABIES MILK FUND ASSOCIATION****Baltimore**

1. Organized 1904.
2. Aim: Educational and preventive work.
3. Board: The board consists of 16 men and 28 women.
4. Territory: The association serves an urban territory with a population of 765,554.
5. Staff: Executive secretary. Supervisor of medical service. Nurses: 1 supervisor of service, 1 director, 1 general supervising, 15 staff. Volunteer workers: 4.
6. Type of work: Home visiting and clinics are offered to prenatal, obstetrical and postnatal patients, as well as to infants.
7. Financial: The budget for the year was \$30,800. The association is a member of the Baltimore Alliance.
8. General statement: The number of patients given home care during the year was 6,342; the number of home visits paid, 92,867; the number of patients who visited the clinic, 25,803.

**THE COUNCIL MILK AND ICE FUND****Baltimore**

1. Organized 1894.
2. Aim: To dispense milk and ice to the deserving poor.
3. Board: The governing board consists of 12 women.
4. Territory: The council serves an urban territory.
6. Type of work: Home visiting conducted for adults as well as for infants and children. Clinics are maintained for maternal cases.
7. Financial: The council is supported by voluntary subscription and the Associated Jewish Charities. No fees are charged.

**FLORENCE CRITTENTON MISSION, INCORPORATED****Baltimore**

1. Organized 1897.
2. Aim: To provide a home where unfortunate and wayward girls may receive proper care; be taught those things that are essential to their well-being, both cultural and industrial; and where under the influence of Christian example and teaching they may be helped to return to normal relations in society.
3. Board: The governing board consists of 15 men and 13 women.
7. Financial: The total budget for the year was \$15,215.67. The mission is supported by dues, donations, and state appropriations.
8. General statement: The year just closed has been most successful. We have ministered to 127 girls and 94 babies. The practical training which these girls receive in nursing, needle work and in the domestic arts, makes life worth while, and prepares them for usefulness when they go out to again earn a livelihood,—this time for two.

**HEALTH DEPARTMENT, BUREAU OF CHILD WELFARE****Baltimore**

1. Organized February 1, 1919.
4. Territory: The bureau serves an urban territory with a population of approximately 765,032.

5. Staff: Director, with 1 assistant. Obstetricians: 3 part time. Pediatricians: 2 part time. Nurses: 25 staff, 1 social service and 3 obstetrical nurses.

6. Type of work: Home visiting and clinics are maintained for prenatal, obstetrical and postnatal patients as well as for infants.

7. Financial: The budget for the year was \$49,844. The bureau is supported by the city.

### JEWISH CHILDREN'S BUREAU

#### Baltimore

1. Organized January, 1914.

2. Aim: Close cooperation among the organizations working for the welfare of Jewish children in Baltimore. The bureau has jurisdiction over children in behalf of whom application is made for institutional or boarding care; children who have to be treated apart from their families; also abandoned children.

3. Board: The board consists of 11 men and 10 women.

4. Territory: The bureau serves an urban territory.

5. Staff: Executive secretary, a psychiatrist, 2 full time social workers, and a clerical assistant.

6. Type of work: Home visits are made to infants and pre-school children. The bureau has visited 2,330 children during the year.

7. Financial: The budget for the year was \$6,000. The bureau is supported by the Associated Jewish Charities.

8. General statement: The bureau acts as a clearing house for all Jewish children-caring agencies.

### MASSACHUSETTS

#### BABY HYGIENE ASSOCIATION

#### Boston

1. Organized 1909. Incorporated 1910.

2. Aim: To supervise the health of infants and pre-school children.

3. Board: The governing board consists of 11 men and 16 women.

4. Territory: The association serves an urban territory, with a population of 657,205.

5. Staff: Executive officer. Doctors: 1 medical director, 26 part time physicians. Nurses: 1 supervisor, 1 special supervising, 25 staff, 3 from other organizations. Nutritionists: 1 supervisor, 8 full time, 1 part time, 2 part time loaned by other organizations. Clerical assistants, 3. Volunteer workers vary in number from 1 to 30.

6. Type of work: Home visiting, clinics, and research work are carried on by the association.

7. Financial: The budget for the year was \$77,500. The association is supported by income from small endowment, contributions, and membership dues.

8. General statement: Posture clinics for children showing slight signs of postural defects were held during the year. Two habit clinics were opened for children of pre-school age.

### DEPARTMENT OF PUBLIC HEALTH, THE COMMONWEALTH OF MASSACHUSETTS

#### Boston

The Massachusetts Department of Public Health, so far as its Division of Hygiene is concerned, is an advisory body. It does no case work in the different cities and towns, consequently its activities are largely educational in character

and have for their purpose the encouragement of new work on the part of the different municipalities of the state. The outstanding activities of the year are:

1. Extension of work for promotion of maternal and infant hygiene.
2. A survey of dental conditions amongst school children.
3. A survey of nutrition activities.
4. Round table conferences for nurses, social workers and others.
5. Conferences for school workers, nurses, physicians, superintendents, members of school committees and others interested in medical examination of school children.

### INSTRUCTIVE DISTRICT NURSING ASSOCIATION

#### Boston

1. Organized 1886. Incorporated 1888.
2. Aim: Bedside care and family health teaching.
3. Board: The governing board consists of 3 men and 29 women.
4. Territory: An urban territory with a population of approximately 747,923 is served.
5. Staff: Supervisor of clinics. Doctors: 4 part time. Nurses: 16 supervising, 102 staff. Dentists: 1 director, 1 part time. Nutritionists: 1 part time. Clerical assistants: 11. Volunteer worker: 1.
6. Type of work: Home visiting, clinics and health centers are maintained for maternal, prenatal and postnatal patients and for infants and children. Dental, visual, orthopedic, and venereal disease patients receive care.
7. Financial: The budget for the year was \$249,274.50. Special contributions and fees support the organization.
8. General statement: The infant mortality rate for the year was as follows:
 

Under two weeks.....	21.3 per 1,000
Under one year.....	5.3 per 1,000
From one to two.....	5.7 per 1,000

### MASSACHUSETTS PARENT-TEACHER ASSOCIATION, INC.

#### Boston

1. Organized 1910.
2. Aim: To promote high standards of home life and cooperation between parents and teachers, in order to secure the best physical, mental and moral development of the child.
3. Board: The governing board is composed of 4 men and 21 women.
4. Territory: The association covers the entire state in its work.
6. Type of work: The work of the Parent-Teacher Association is to interest all people in the training and development of the child. It is a part of a great national movement which, during the past year alone has gained 100,000 new adherents. It is a clearing house of information about parent-teacher matters throughout the state.
8. General statement: The association has 10,000 members in 140 local groups; some in cities, some in towns, some in small rural communities.

### MASSACHUSETTS SOCIETY FOR THE PREVENTION OF CRUELTY TO CHILDREN

#### Boston

1. Organized 1878.
  2. Aim: To prevent physical injury, removing a child whenever necessary and punishing offenders when the best interests of all concerned demand it.
- To prevent physical neglect, in extreme cases removing the children and finding better homes through suitable agencies.

To rescue children from immoral surroundings and shield them from contamination.

To protect wives and dependent children from non-support and desertion by the breadwinners, and to prevent abandonment by either parent.

To secure suitable guardians for children who have been deprived of their natural guardians or who should be removed from them in the interests of humanity.

To engage in an organized way to make the community increasingly sensitive to forms of abuse that exist, but whose evil results have not been appreciated.

3. Board: The society is governed by a board of 21 men and 15 women.

4. Territory: The work of the organization covers the entire state.

5. Staff: Supervisor of agents, assistant supervisor, 18 agents. Chief clerk: 1. Physician: 1. Matron: 1.

6. Type of work: We are chiefly concerned with the "neglected" child, described in the law as one who, "by reason of the neglect, crime, cruelty, insanity or drunkenness or other vice of its parents, is growing up without education, or without salutary control, or without proper physical care, or in circumstances exposing him to lead an idle and dissolute life." Culpability on the part of the parents is necessary to constitute a legally "neglected" child, and to deal with this culpability is our job. The society also renders personal service in the protection of children whose rights are threatened or violated.

7. Financial: The total budget for the year was \$163,200. The society is supported entirely by voluntary contributions and bequests.

8. General statement: By acceptance of its charter, this society assumed the duty of answering every appeal for its help to any abused or neglected child anywhere in the state. The work is most difficult and, at the same time, the most delicate in the social field. Its demands are most exacting. During the last fiscal year, the society has been active to the full extent of its resources.

## THE BOSTON FLOATING HOSPITAL

### Boston

1. Organized July 1, 1894.

2. Aim: To care for and relieve the sick babies of parents unable to provide the best air, food, care and medical skill; to make a careful scientific study of the diseases of children, especially those connected with the gastro-intestinal tract; to train and instruct medical students, nurses and mothers in the care and treatment of sick babies.

3. Board: The hospital is governed by a board of 15 men.

4. Territory: The entire city of Boston is served as well as other localities.

5. Staff: Executive secretary. Doctors: 1 supervisor, 1 full time, 4 volunteer. Nurses: 1 supervisor (personnel distributed at close of season). Clerical assistants: 2. Volunteer workers: 2.

6. Type of work: Home visiting, clinics, classes and hospital care compose the greater part of the service, for mothers and children. Preventive and educational work carried on through home visiting, clinics and hospital work. A Health Center is maintained for infants.

7. Financial: The budget for the year was \$96,750.20. The hospital is supported by contributions.

8. General statement: The hospital spends each day and night of summer on the ocean. During the fall and winter intelligent follow-up work is given by nurses acting under medical direction from the "on shore" hospital and clinic of the Floating Hospital.

**MAVERICK DISPENSARY, INC.****East Boston**

1. Organized 1908.
2. Aim: The dispensary was organized to furnish medical aid by daily clinics and by district service both to relieve and to prevent disease.
3. Board: The governing board is composed of 10 men and 10 women.
4. Territory: The dispensary serves one section of Boston, i. e., East Boston, with a population of approximately 63,000.
5. Staff: Head worker who also supervises the social service work. Doctors: 3 part time. Dentists: 1 dental hygienist, 2 part time. Nurse: 1. Nutritionist: 1. Clerical assistants: 2. Volunteer worker: 1.
6. Type of work: Clinics are held for visual, dental, and mental patients, both infants and children. Nutritional classes are held for children.
7. Financial: The budget for the year was \$12,000. The dispensary is supported by donations and fees.
8. General statement: 15,185 patients visited the dispensary during the past year.

**WARD FOUR INFANT WELFARE COMMITTEE OF CAMBRIDGE****Cambridge**

1. Organized October 1, 1914.
2. Aim: The object of organizing was to further the health of babies and children in Ward Four. (Other wards cared for by city.)
3. Board: The governing board is composed of 1 man and 12 women.
4. Territory: An urban territory with a population of 10,000 is served.
5. Staff: Executive of the organization, who is a registered nurse. Volunteer medical director: 1. Supervising nurse: 1. Volunteer nutritionist: 1. Volunteer workers: 3.
6. Type of work: Home visiting and clinics for infants and pre-school children, and classes in mothercraft and nutrition constitute the main part of the work. The service rendered is both educational and preventive.
7. Financial: The budget for the year was \$1,400. The organization is supported by the Cambridge Visiting Nurse Association and by special contributions.
8. General statement: The infant mortality rate for the year was 59-62 per 1,000.

**VISITING NURSING ASSOCIATION OF FITCHBURG, INC.****Fitchburg**

1. Organized 1913.
2. Aim: Nursing the sick is the primary function of the association.
3. Board: The association is governed by a board of 8 men and 10 women.
4. Territory: The association serves an urban territory with a population of 41,000.
5. Staff: Superintendent of the association. Doctors: 2 part time. Nurses: 1 supervising, 8 staff. Clerical assistant: 1.
6. Type of work: Home visiting, particularly for mothers and infants, is the chief work of the association. Clinics for infants are also held.
7. Financial: The budget for the year was \$18,282.12. The association is supported by contributions and subscriptions.
8. General statement: The nurses of the association visited the schools and gave talks on health, and inspected the children for personal cleanliness, as a part of their work during the past year.

### HOLYOKE CHILD WELFARE COMMISSION

#### Holyoke

1. Organized April, 1911.
2. Aim: To carry on preventive and educational work.
3. Board: The governing board consists of three men and three women.
4. Territory: The commission serves an urban territory with a population of 65,000.
5. Staff: Doctors: 3 part time, 1 director. Clerical assistants: 2. Volunteer workers: 2.
6. Type of work: Home visiting, clinics and hospital care are offered to pre-natal, obstetrical and postnatal patients, as well as to infants and pre-school children.
7. Financial: The budget for the year was \$26,000. The commission is supported by the city.
8. General statement: 4,983 babies were visited during the year by the staff of the commission.

### LOWELL GUILD

#### Lowell

1. Organized 1898. Incorporated 1911.
2. Aim: To give general bedside nursing and maintain weekly conferences for infants and children of pre-school age.
3. Board: The governing board consists of 5 men and 6 women.
4. Territory: The guild serves an urban territory with a population of 112,000.
5. Staff: Nurses: 1 supervisor, 1 supervising, 9 staff. Clerical assistant: 1. Volunteer workers: 2.
6. Type of work: Home visiting is maintained for maternal, prenatal, obstetrical and postnatal patients and also for infants and children. In addition, clinics are held for infants and pre-school children.
7. Financial: The total budget for the year was \$19,573.25. Contributions, appeal letter, "tag day," fees, and payments from the Metropolitan Life Insurance Company support the guild.
8. General statement: The number of patients given home care during the year was 1,994; the infant mortality rate was 90 per 1,000.

### INSTRUCTIVE NURSING ASSOCIATION

#### New Bedford

1. Organized 1891. Incorporated 1900.
2. Aim: To provide skilled nursing care and such other service as is needed for the sick in their homes, and for the teaching of hygiene and sanitation.
3. Board: The governing board consists of 14 women.
4. Territory: The association serves an urban territory, with occasional calls outside of city not covered by other nursing service, the population is approximately 125,000.
5. Staff: Superintendent. Nurses: 2 supervisors, 11 staff. Clerical assistant: 1. Volunteer workers: 10.
6. Type of work: Home visiting for maternity and postnatal cases, as well as infants and school children.
7. Financial: The budget for the year was \$17,850. The association is supported by special contributions and the community chest.
8. General statement: The association is working to secure better care of pre-school children, and nursing care of communicable disease patients.

**NEW BEDFORD CHILDREN'S AID SOCIETY****New Bedford**

1. Organized 1842.
2. Aim: To care for destitute, neglected, and wayward children of either sex and of any race or creed, by providing them so far as possible with close supervision in selected family homes.
3. Board: The governing board consists of 21 women.
4. Territory: The society serves both urban and rural territory. The population of New Bedford is 121,217.
5. Staff: A general secretary and a supervisor. Visitors: 5. Clerical assistants: 3.
6. Type of work: The society furnishes supervision and care for both mothers and children.
7. Financial: The total budget for the year was \$43,094.71. The society is supported by membership dues, contributions, community chest and fees.
8. General statement: The total number of children cared for during the year was 259.

**NEWBURYPORT HEALTH CENTER****Newburyport**

1. Organized July, 1920.
2. Aim: To keep children well by careful supervision and to teach mothers in child care.
3. Board: The governing board consists of 8 men and 5 women.
4. Territory: The center serves an urban territory with an approximate population of 15,618.
5. Staff: Director. Nurse: 1 staff. Doctors: 4 part time. Clerical assistant: 1.
6. Type of work: Home visiting and clinics for children and adults.
7. Financial: The budget for the year was \$5,800. The center is supported by membership dues, the Red Cross roll call, the Christmas Seal sale, income from an invested fund and a small fund of the Anti-Tuberculosis Association.
8. General statement: The infant mortality rate for the year was 62.

**MICHIGAN****BENTON HARBOR CHILD WELFARE ASSOCIATION****Benton Harbor**

1. Organized November, 1919.
2. Aim: To supervise feeding and care of pre-school children, particularly those under 2 years of age.
3. Board: The governing board consists of 8 women.
4. Territory: The work of the association covers an urban territory with a population of 12,000.
5. Staff: Doctor: 1 part time. Nurse: 1.
6. Type of work: A weekly clinic and home visiting.
7. Financial: The total budget for the year was \$2,000. The association is supported by an allowance from the united charities.

**BABIES MILK FUND OF DETROIT****Detroit**

1. Organized 1906.
2. Aim: To conduct a prophylactic clinic and follow-up work.
3. Board: The governing board is composed of 4 men and 15 women.
4. Territory: Both urban and rural territories are served.
5. Staff: Doctors: 1 director, 2 part time. Nurses: 1 superintendent, 6 staff.

6. Type of work: Home visiting and clinics for infants and children are conducted. Preventive, educational, cardiac, and orthopedic care is given.

7. Financial: The association is an auxiliary of the Visiting Nurse Association; the total budget for the two organizations was \$121,328.93. The association is supported by the community chest.

8. General statement: There were 259 clinics held during the year, with an attendance of 3,204 patients.

## CHILDREN'S FREE HOSPITAL ASSOCIATION

### Detroit

1. Organized 1887.

2. Aim: The object for which this corporation is organized is to care and provide for sick and suffering children under 12 years of age, whose parents or friends are unable or unwilling to provide for them; and to furnish such medical and surgical aid as they may require. This corporation is to be forever non-sectarian in character.

3. Board: A board of 24 women governs the association.

4. Territory: The Children's Free Hospital Association serves the entire city with a population of approximately 993,678.

5. Staff: Superintendent of hospital. Secretary. Doctors: 7 consulting physicians, 6 consulting surgeons, 2 consulting neurologists. Nurses: 2 instructors, 20 pupils, 24 affiliated. Social worker: 1. Dietitian: 1. Pharmacist: 1. Technicians: 2.

6. Type of work: A weekly clinic is maintained for the discussion of important cases. Students from the Detroit College of Medicine and Surgery are receiving daily bedside instruction. In addition, lectures are given by members of the medical staff to nurses in the training school. The work of teaching the nurses and younger pediatricists and internes is one of the most important functions of the hospital, next in importance to the actual care of the children.

7. Financial: The budget for the year was \$145,096.78. The hospital is supported by membership dues, special contributions and appropriations from the community fund.

8. General statement: The work of the out-patient department has grown considerably during the past year; two clinics are maintained. The pathological laboratory has been entirely remodeled and equipped with modern appliances.

## MERRILL-PALMER SCHOOL

### Detroit

1. Organized October 20, 1918.

2. Aim: The promotion and development of home making and child-care education.

3. Board: The governing board consists of 7 men and 6 women.

4. Territory: The school serves both an urban and a rural territory.

5. Staff: Director. Nutritionists: 1 supervisor, 2 staff. Supervisor of medical service. Clerical assistants: 3.

6. Type of work: General education in the fundamentals of nutrition and courses in home making. Better methods of teaching child care and management are developed.

7. Financial: The budget for the year was approximately \$60,000. The society is supported by an endowment and a small tuition fee.

8. General statement: The society is developing programs of work, first of an extension type which reach larger groups in the community, and second of intensive character which in the beginning at least can reach only a limited group since the formulation of courses is one of the problems undertaken and this cannot be accomplished with large groups. A special project for the year was the nursery school developed for children between 2 and 5.



## CLINIC FOR INFANT FEEDING

## Grand Rapids

1. Organized 1911.
2. Aim: Strong healthy babies and children; strong healthy mothers. We would like to have every child entering school free from every correctible physical defect; with a healthy mind and good habits of living.
3. Board: The governing board consists of 25 members.
4. Territory: The clinic serves the entire city of Grand Rapids which has an approximate population of 137,634.
5. Staff: Executive secretary. Doctors: 1 director, 24 volunteers. Nurses: 1 director, 2 supervising, 12 staff, 8 of whom are infant welfare nurses, 3 prenatal and 1 in charge of Little Mothers' League. Dentists: 2 volunteers. Nutritionists: 1 supervisor, 3 part time. Clerical assistants: 2. Volunteer workers: 18.
6. Type of work: Home visiting and clinics for prenatal and postnatal patients and for infants and children are maintained. A Health Center is maintained for prenatal patients.
7. Financial: The budget for the year was \$31,361.79. The clinic is supported by appropriation from the city, by special contributions and a share from the community chest. Nursing service is paid for when possible.
8. General statement: The clinic uses a continuous record beginning with the prenatal period and extending up to school age; the school nurse then assumes the responsibility.

## MICHIGAN DEPARTMENT OF HEALTH

## Lansing

1. Organized 1872.
2. Aim: The aim of the Department of Health is to demonstrate the value of nursing service throughout the state; to demonstrate a health education program and thereby develop community responsibility toward the furtherance of all health problems; and to get the various local committees to assume the financial responsibility after a successful demonstration of the work.
3. Board: The advisory council consists of 5 men.
4. Territory: The work of the department covers the entire state.
5. Staff: Commissioner of Public Health. Doctors: 6 full time. Nurses: 1 supervising, 5 staff. Dentists: 1 supervising, 4 full time. Supervisor of social service: 1.
6. Type of work: Home visits and clinics are conducted for maternal, prenatal and postnatal patients as well as for infants and children. Visual, dental, mental, cardiac, and venereal disease cases are cared for.
7. Financial: The budget for the year was \$431,348. The department is supported by state and federal funds.
8. General statement: The importance of feeding children properly cannot be overemphasized. At the Preventorium, maintained by the Department of Health, the gain in weight of the first 27 children discharged was 1,400 per cent above the normal gain of weight.

## MINNESOTA

## SCOTTISH RITE INFANT WELFARE DEPARTMENT

## Duluth

1. Organized 1910.
2. Aim: The department was organized for the purpose of keeping well babies well, and to try to lead the mothers to see the wisdom of preventive care and also the immense value of advice and a right start.
3. Board: The department is directed by the Scottish Rite Masons.

4. Territory: The department covers the entire city of Duluth, the population of which is 98,917.

5. Staff: Executive secretary. Doctors: 1 supervising, 5 volunteers. Nurses: 1 supervisor, 1 staff. Volunteer workers: 6.

6. Type of work: Home visiting, clinics and classes in infant care are conducted.

7. Financial: The department is financed by the Scottish Rite Masons.

8. General statement: Four infant welfare stations are maintained. During the year 2,251 visits were made by the nurses. The total clinic attendance was 5,122.

### COUNCIL OF SOCIAL AGENCIES

#### Minneapolis

1. Organized 1915.

2. Aim: To serve the other agencies of the community.

3. Board: The council is governed by a board of 22 men and 3 women.

4. Territory: The work of the council covers an urban territory with a population of 380,498.

5. General statement: The council conducts a community fund and serves as a coordinating and stimulating agency. No direct service is given individuals.

### DIVISION OF CHILD HYGIENE, STATE BOARD OF HEALTH

#### Minneapolis

1. Organized July, 1922.

2. Aim: To promote welfare and hygiene of maternity and infancy.

3. Board: The Federal Board of Maternity and Infant Hygiene is composed of 2 men and 1 woman.

4. Territory: The division serves the entire state, the population of which is 2,387,125.

5. Staff: Director, secretary, supervisor of clinics, and superintendent of public health nursing.

6. Type of work: Educational work is conducted.

7. Financial: The budget for the past year was \$39,000.

8. General statements: Since the division has only been in existence for six months, not many results can as yet be reported.

### INFANT WELFARE SOCIETY OF MINNEAPOLIS

#### Minneapolis

1. Organized 1910. Incorporated 1913.

2. Aim: To provide medical supervision and nursing care for expectant mothers who cannot afford this service. To teach mothers of children of pre-school age the importance of proper feeding, environment and control of their children.

3. Board: The governing board consists of 9 men and 10 women.

4. Territory: The society serves an urban territory with a population of 380,498.

5. Staff: Executive secretary. Director of prenatal work. Director of pre-school work. Doctors: 10 part time. Nurses: 1 instructing, 14 staff. Clerical assistants: 2. Volunteer workers: 50. The students of the Home Economics Department of the University of Minnesota give part-time work in the pre-school service.

6. Type of work: Home visits and clinics for prenatal patients as well as for infants and pre-school children are conducted.

7. Financial: The total budget for the year was \$37,600. The society is supported by the community chest.

8. General statement: The total attendance at clinics during the year was 17,388; 26,993 visits have been made in the homes by the nurses. The infant mortality rate for the babies under our care was 1 per cent.

## THE VISITING NURSE ASSOCIATION OF MINNEAPOLIS

### Minneapolis

1. Organized: The association began as a Committee of the Associated Charities in 1904, and became incorporated as a separate organization in 1917.
2. Aim: To give skilled nursing care to residents of Minneapolis who are sick in their homes and to teach personal hygiene, cleanliness and prevention of disease.
3. Board: The association is governed by a board of 6 men and 26 women.
4. Territory: Service is given the city of Minneapolis which has a population of 437,056.
5. Staff: Superintendent of the association. Doctors: 1 supervisor, 9 part time. Nurses: 1 supervisor, 5 special, 24 general staff. Dentists: 1. Clerical assistants, 3. Volunteer workers: 58.
6. Type of work: Home visiting and classes for mothers. Chronic and incurable patients and sufferers from tuberculosis are cared for. All kinds of medical and surgical service is given.
7. Financial: The total budget for the year was \$63,457.57. A share from the community fund supports the association. Fees are regulated.
8. General statement: The total visits made by the staff was 44,497; 5,939 patients were cared for. The nurses averaged 8.1 visits per day. Sixty-three children attended a camp for children susceptible to tuberculosis the past year. The total gain in weight of all the children was 211 pounds. The average cost per meal per child was 9 cents.

## ST. PAUL BABY WELFARE ASSOCIATION

### St. Paul

1. Organized August, 1910.
2. Aim: To improve the health conditions of the children of St. Paul through the education of the mothers.
3. Board: The association is governed by a board of 4 men and 5 women.
4. Territory: The association serves an urban territory with a population of 275,000.
5. Staff: Director of the association. Doctors: 1 supervisor, 13 part time. Nurses: 1 supervisor, 2 general supervising, 10 staff. Social service worker: 1. Clerical assistants: 2.
6. Type of work: Home visiting, clinics and health centers are maintained for prenatal and postnatal patients as well as for infants and pre-school children.
7. Financial: The total budget for the year was \$22,900. The association is supported by the community chest and contributions.
8. General statement: The number of infants given home care during the year was 12,429; the number of home visits paid to infants and pre-school children was 6,091; the infant mortality rate was 12 per 1,000 (in children under our care).

## MISSOURI

### ST. LUKE'S CHILD WELFARE CLUB, MISSOURI

#### Kansas City

A few salient points relative to the year's work of the St. Luke's Child Welfare Club:

1. The growth along clinical lines includes the establishment of an Orthopedic Clinic. The Pediatric, Ear, Nose and Throat, Eye and Prenatal Clinics have progressed most satisfactorily, clinical attendance showing an increase of 32 per cent this year.

2. The health educational phase of the work includes school clinics held daily by the nurses at the schools; nutrition classes for 10 per cent underweight; hygiene classes for mothers conducted by the nurses at clinic headquarters; dental hygiene, and the weighing, measuring and examining of all children, both pre-school and school age. The daily school clinics provide a double service, first in checking epidemics; second, in keeping down truancy. The weighing, measuring and examining campaigns bring to attention the underweight children and those needing corrective work. Nutrition classes are formed for the underweights and each child provided with a chart on which to record his gains. A luncheon is served daily and the follow-up work consists of a visit in the home by the nurse.

3. At a conference of social agencies operating on the west side was developed the thought that a thoroughly equipped comprehensive Health Center should be established on the west side, all social agencies to cooperate in concentrating the clinical work of the district, so as to have each case get the best medical facilities and to provide sufficient cases to justify the doctors in giving their time. Such a plan was agreed upon and the St. Luke's Child Welfare Club being the only organization in this field doing medical welfare work exclusively, was asked to undertake the establishment and maintenance of such a Clinic, all other agencies agreeing to co-operate with and lend encouragement. This new plan was a great departure in policy, as the organization was doing child work only.

### BOARD OF RELIGIOUS ORGANIZATION

St. Louis

1. Organized 1916.
2. Aim: Civic and social service work — Betterment of St. Louis.
3. Board: The leaders of the organization are 25,000 church women.
4. Territory: The city of St. Louis is served by the Board.
5. Staff: The workers are trained in child psychology.
6. Type of work: The Mothercraft Department gives monthly outlines on character development in the pre-school child; the Child Welfare Department furnishes part of the volunteer force of social workers who serve lunch in the schools.
7. Financial: The organization is supported by the churches.
8. General statement: A marked improvement was noticed among the children soon after the lunch room had been established.

### MISSOURI TUBERCULOSIS ASSOCIATION

St. Louis

1. Organized May 15, 1907.
2. Aim: Dissemination of knowledge concerning the causes, treatment and prevention of tuberculosis; investigation of the prevalence of tuberculosis in Missouri and the collecting and publishing of useful information; securing of proper legislation for the relief and prevention of tuberculosis; cooperation with the public authorities (State and Local Boards of Health), the National Association for the Study and Prevention of Tuberculosis, medical societies, and other organizations in approved measures adopted for the prevention of the disease; promotion in the organization and work of local societies in all parts of Missouri; encouragement of adequate provision for consumptives by the establishment of sanatoria, hospitals, dispensaries and otherwise; and in general to do all things and acts having as their object the relief of those afflicted with tuberculosis and the control and prevention of that disease throughout the entire state.
3. Board: The governing board consists of 46 men and 20 women.
4. Territory: The work of the association covers an urban territory with a population of 773,000, and a rural territory with a population of 2,071,966.
5. Staff: Executive secretary, office secretary, director of Sanatorium Extension Service, director of Modern Crusade, and field representative.

6. Type of work: The association deals with tuberculosis, child hygiene, rural sanitation and health legislation.

7. Financial: The total budget for the year was \$39,000. The association is supported by sale of Tuberculosis Christmas Seals.

8. General statement: The reduction in the death rate from tuberculosis and the reduction of the percentage of deaths from all causes are the outstanding achievements resulting from the service rendered by the Missouri Tuberculosis Association and by local tuberculosis organizations in Missouri in the last ten years. In 1921 the percentage of deaths from tuberculosis of deaths from all causes was but seven-tenths of what the same was in 1911. In Missouri, within the ten years under consideration, the general downward trend of the incidence of tuberculosis has been uniformly more rapid than in any other state in the Union. The chief service rendered by the Missouri Tuberculosis Association in achieving these results and in opening this favorable prospect to view has been to promote and to foster health educational work in the schools of Missouri. To school officers, teachers and pupils belongs the credit for arousing the widespread interest in personal health and for stimulating the sense of public health responsibility, finding expression in the passage of laws pertaining to public health and in promoting and securing their observance.

### MUNICIPAL VISITING NURSES

#### St. Louis

1. Organized September, 1915.

2. Aim: To give better prenatal care; to reduce infant mortality and morbidity through clinics and home visiting; to segregate the tubercular and educate the community regarding tuberculosis; to stimulate better statistics regarding tuberculosis.

3. Board: The governing board consists of 3 men and 4 women.

4. Territory: The organization serves an urban territory with a population of 773,000.

5. Staff: Doctors: 1 supervisor, 2 full time, 14 part time. Nurses: 1 director, 3 supervising, 26 staff. Clerical assistants: 3. Volunteer workers: 40.

6. Type of work: Home visiting, clinics, classes, research work, and health centers are the main features of the work. Care of mothers and children and tubercular patients is emphasized.

7. Financial: The total budget for the year is \$51,830. The organization is supported by appropriations from the city, the Red Cross and the Tuberculosis Society.

8. General statement: During the year 31,554 patients visited the clinic and 48,205 home visits were made.

### ST. LOUIS CHILDREN'S AID SOCIETY

#### St. Louis

1. Organized 1909.

2. Aim: The society was organized to care for delicate babies and children; unmarried mothers and infants, and older children presenting conduct problems.

3. Board: The governing board consists of 14 men and 22 women.

4. Territory: The society serves an urban territory with a population of 800,000.

5. Staff: General secretary. Physician: 1 part time. Social service workers: 1 supervisor, 8 full time. Clerical assistants: 2. Volunteer workers: 4.

6. Type of work: Home visiting and clinics are maintained for infants, pre-school and school children. Visual, dental, mental, orthopedic, and venereal disease cases are treated in the clinics.

7. Financial: The society is supported by membership dues and special contributions.

8. General statement: The medical work is referred to the Washington University Dispensary, and the dental work to the St. Louis University Dental Clinic. The number of home visits paid during the year was 8,505.

### ST. LOUIS CHILDREN'S HOSPITAL

#### St. Louis

1. Organized 1879.

2. Aim: To maintain an institution, non-sectarian in its management and its benefaction, for the treatment of children from birth to 14 years.

3. Board: The governing board consists of 100 women.

4. Territory: The hospital serves the entire city of St. Louis.

5. Staff: Administrator of hospital. Doctors: 1 director, 3 full time, 45 volunteer. Nurses: 1 director, 3 supervising, 5 staff, 30 pupil. Dentists: 1 supervisor, 2 dentists. Social service workers: 1 supervisor, 7 full time. Clerical assistants: 5.

6. Type of work: Hospital care is offered for dental, mental, cardiac, orthopedic, and venereal disease patients. There is also an occupational therapy department.

7. Financial: The hospital is supported by endowment, membership dues, and private subscriptions. Hospital fees are regulated for each case.

8. General statement: The hospital aims to eliminate disease and physical defects from the community by: 1. Curing children of their diseases and defects preferably in their homes, holding parents jointly responsible; or, when cure is not possible there, caring for them in the wards of the hospital. 2. Finding the causes of their diseases and defects and cooperation with civic, social and religious agencies educating their families to avoid such causes in future.

### ST. LOUIS MATERNITY HOSPITAL

#### St. Louis

1. Organized 1908.

2. Aim: To care for maternity patients:

3. Board: The hospital is governed by a board of 30 women.

4. Territory: An urban territory with a population of 773,000 is served by the hospital.

5. Staff: Superintendent of the hospital. Doctors: 1 director, 50 volunteer. Nurses: 1 superintendent, 5 supervising, 14 staff. Social service worker: 1.

6. Type of work: The care and nursing of maternity patients at the hospital is the main feature of the work. A prenatal clinic is also conducted.

7. Financial: The budget for the year is \$45,000. The hospital is supported by contributions, membership dues, public entertainments, and fees.

8. General statement: The number of patients given hospital care during the year was 500. The number of patients who visited the clinic was 1,500.

### ST. LOUIS PEDIATRIC SOCIETY

#### St. Louis

1. Organized November 22, 1885.

2. Aim: To promote the art and science of pediatrics, to stimulate the interest of the profession in this special branch of medicine, to spread the knowledge of public and private hygiene in so far as it affects the welfare of children.

4. Territory: The society serves an urban territory with a population of 773,000.

6. Type of work: The society, as an organization, does no welfare work but its individual members work through the other organizations in the community.

**THE MISSOURI SCHOOL OF SOCIAL ECONOMY****St. Louis**

2. Aim: The school was organized to train social workers including public health nurses.

3. Board: The Board of Regents of the University is the governing board of the School of Social Economy. There is in addition a small governing board for the Teaching Center; this board consists of 2 men and 6 women.

6. Type of work: The work consists of: Lectures in methods of social work, lectures in problems of Public Health Nursing, field work in Social Service, field work in Public Health Nursing.

7. Financial: The school expenses proper \$12,000, operation of Nurses' Teaching Center \$11,000. The school is supported by the University of Missouri; the Teaching Center, however, is provided for by local contributions.

8. General statement: The Missouri School of Social Economy is the only school in the Southwestern Division of American Red Cross, excluding Texas.

**NEBRASKA****DIVISION OF CHILD HYGIENE DEPARTMENT OF PUBLIC WELFARE****Lincoln**

1. Organized September 15, 1921.

2. Aim: Preventive and educational work.

3. Board: The division is under the control of the State Department of Public Welfare.

4. Territory: Both urban and rural territory is served.

5. Staff: Secretary of the department. Chief of the medical service. Nurses: 1 director, 3 staff. Social workers: 3. Clerical assistant: 1.

6. Type of work: Clinics, classes and health centers are maintained, particularly for infants and mothers. Hospital care is given orthopedic and tubercular patients, and visual and dental work are included in the service given patients.

7. Financial: The budget for the year was approximately \$18,000. The department is supported by funds from the state and federal governments.

8. General statement: Social service work in connection with children is carried on by the Bureau of Child Welfare. This bureau also makes inspection of maternity homes. Reports of 202,682 children were received during the year. Contests and conferences have been held in different parts of the state and many teachers' institutes have been reached. The infant mortality rate for the year was 58.81 per 1,000.

**EXTENSION SERVICE, COLLEGE OF AGRICULTURE****Lincoln**

1. Incorporated 1919.

2. Aim: The object of the organization is rural extension work.

3. Board: The governing board of the Agricultural Experiment Station of Nebraska directs the Extension Service.

4. Territory: A rural territory with a population of 600,000 is served.

5. Staff: Director of service and 2 assistants.

6. Type of work: Home health has been promoted through women's meetings and talks before schools. The following subjects were discussed before groups of

rural women: Prenatal and Infant Care, Child Care, Contagious Diseases, Keeping the Family Well, and Health Habits for Home Folks.

7. Financial: The Extension Service is supported by the state and federal governments.

8. General statement: Home nursing demonstrations proved popular during the year. The women attending these demonstrations showed much interest. An exhibit of the Extension Service at the State Fair showed a booth devoted to health and hygiene.

## THE VISITING NURSE ASSOCIATION OF OMAHA

### Omaha

1. Organized 1896.

2. Aim: To give skilled nursing care to the sick in their homes, to teach personal hygiene, cleanliness and the prevention of disease.

3. Board: The association is directed by a board of trustees composed of 30 women.

4. Territory: The association serves both rural and urban territory with a combined population of 200,000.

5. Staff: Superintendent of the association, Chairman of Medical Advisory Board of Infant Welfare. Doctors: 4 part time. Nurses: 2 supervising, 21 staff. Volunteer workers: 10 to 12.

6. Type of work: Home visiting and clinics are the chief feature of the service given.

7. Financial: The total budget for the current year was \$40,000. The association is supported by membership dues, special contributions, appropriations from city and state, and income from the Metropolitan Life Insurance Company. Fees are regulated.

8. General statement: In 1921 our staff of nurses made 49,375 visits to 6,514 patients. This is an average of 8 home visits to each patient.

## NEW HAMPSHIRE

### MANCHESTER HEALTH DEPARTMENT

#### Manchester

1. Organized 1885.

2. Aim: The administration of health laws, and to institute and administer measures for the preservation of public life.

3. Board: The governing board is composed of 8 men.

4. Territory: An urban territory with an approximate population of 78,200 is served.

5. Staff: Health officer. Doctors: 7 part time. Nurses: 13 staff. Dentists: 2 part time. Clerical assistants: 2.

6. Type of work: Home visiting and a Health Center are maintained for pre-natal patients and infants. Medical inspection is given school children. Venereal disease patients also receive care.

7. Financial: The budget for the year was \$72,810. The department is supported by an appropriation from the city.

8. General statement: A Health Quarterly is published and distributed by the department. In the Infant Welfare Department 1,887 babies are under supervision; 4,516 home visits were made by the staff during the year.



## NEW JERSEY

## CHILD FEDERATION OF ATLANTIC CITY

## Atlantic City

1. Organized May 5, 1916.
2. Aim: To actively advance the best interests of the babies and children of Atlantic City; to safeguard their moral, mental and physical health.
3. Board: The governing board is composed of 3 men and 17 women.
4. Territory: The federation serves an urban territory with a population of approximately 50,682.
5. Staff: Child hygiene teacher. Doctors: 1 supervisor, 2 volunteers. Nurses: 1 director, 1 supervising, 1 staff. Social service worker: 1. Volunteer workers: 4.
6. Type of work: Home visiting and clinics for prenatal and postnatal patients as well as for babies and pre-school children are conducted. Preventive and educational work are features of the service rendered.
7. Financial: The total budget for the year is \$2,000. The federation is supported by membership dues, appropriations, contributions, also by card parties and lawn fetes.
8. General statement: During the year 3,452 visits were made to mothers and babies, and 1,004 babies and pre-school children were weighed and measured. Advice as to feeding and general care was given.

## THE SOCIETY OF THE BABIES' HOSPITAL

## Newark

1. Organized 1896.
2. Aim: The care and feeding of children.
3. Board: The hospital is governed by a board of 16 men and 61 women.
4. Territory: The entire state receives service.
5. Staff: Superintendent of the hospital. Doctors: 1 supervisor, 20 volunteer. Nurses: 1 directing, 2 general supervising, 3 staff. Social workers: 1 supervisor, 2 assistants. Clerical assistant: 1. Volunteer workers: 4.
6. Type of work: Home visiting, clinics and hospital service are maintained for infants. Preventive and educational work are stressed. Special attention is also given to orthopedic patients.
7. Financial: The total budget for the fiscal year was \$31,377.28. The hospital is supported by an appropriation from the city, contributions and membership dues. Fees are regulated for each patient.
8. General statement: During the past year 692 infants were enrolled at the clinic; 1,414 home visits were paid and 479 patients were given hospital care.

## DIET KITCHEN OF THE ORANGES

## Orange

1. Organized 1904.
2. Aim: Supervision and instruction regarding the care and feeding of babies and pre-school children, and the dispensing of pure milk to babies, undernourished children, the sick and tubercular.
3. Board: The governing board consists of 14 women.
4. Territory: An urban territory is covered.
5. Staff: Nurses: 2 who act as supervisors and field workers. Doctors: 2 full time. Social worker: 1.
6. Type of work: Home visiting, clinics, and health centers are maintained particularly for infants and prenatal and postnatal patients.
7. Financial: The budget for the year was \$25,553. The organization is supported by the Welfare Federation of the Oranges, membership dues and special contributions. It is about 81 per cent self-supporting.
8. General statement: During the year the nurses made 5,021 visits.

# **NEW YORK** **INFANT WELFARE ASSOCIATION**

## **Batavia**

1. Organized 1910.
  2. Aim: The promotion of the welfare and hygiene of maternity and infancy, for better babies and to look after children under pre-school age.
  3. Board: The association is governed by a board of 15 women.
  4. Territory: An urban territory with a population of approximately 14,000 is served.
  5. Staff: The staff consists of one nurse and part-time physicians.
  6. Type of work: Clinics are held once a week at the station under the supervision of one of the physicians from the city. Home visits are made to new babies; prenatal cases are given treatment at home. The babies are weighed and measured at the station. Little Mothers' League classes are conducted once a week.
  7. Financial: The association is supported by the city, by membership dues and by a community fund.
  8. General statement: Close touch is kept with the babies and expectant mothers by the directors of the 15 districts. Reports are made once a week at the regular meeting. A car is maintained for the nurse.
- During the month of October a total of 208 visits were made by the nurse with a station attendance of 311 persons.

# **MATERNITY CENTER ASSOCIATION OF THE BOROUGH OF BROOKLYN**

## **Brooklyn**

1. Organized August, 1918.
2. Aim: The association aims to teach the public the vital importance of adequate maternity care, and to secure in cooperation with all existing agencies such care for the women of Brooklyn.
3. Board: The association is under the joint control of the medical advisory board, consisting of 4 men; and the board of directors, consisting of 47 women.
4. Territory: The association serves an urban territory.
5. Staff: Doctors: 2 part time. Nurses: 1 supervisor, 1 supervising, 4 staff. Clerical assistant: 1. Volunteer worker: 1.
6. Type of work: Home visiting and clinics are conducted for prenatal and postnatal patients. Classes are held for prenatal patients and preventive and educational work is carried on.
7. Financial: The budget for the year was \$12,000. The association is supported by the "Center Shop" (a sport shop for women and children, the proceeds of which are used for Maternity Center Association work) and membership dues.
8. General statement: During the year 1,939 patients visited the clinic and 4,106 home visits were paid by the nurses and doctors.

# **VISITING NURSE ASSOCIATION OF BROOKLYN**

## **Brooklyn**

1. Organized May, 1888. Incorporated 1919.
2. Aim: To give skilled nursing care to the sick in their homes; to teach personal hygiene; cleanliness and the prevention of disease.
3. Board: The governing board consists of 4 men and 26 women.
4. Territory: The association serves an urban territory with a population of 2,018,356.

5. Staff: Nurses: 1 superintendent, 7 supervising, of whom 2 are special, 80 staff, of whom 12 are special. Nutritionist: 1 part time. Clerical assistants: 4. The Junior League Auxiliary offers volunteer work.

6. Type of work: Home visits are paid maternal, prenatal and postnatal patients. All ages receive care, and clinics are maintained.

7. Financial: The budget for the year was \$133,288.78. The association is supported by contributions, fees and membership dues.

8. General statement: During the year the nurses of the association made 18,092 visits to 3,136 prenatal patients.

## JAMESTOWN VISITING NURSE ASSOCIATION

### Jamestown

1. Organized January 6, 1909.

2. Aim: The prevention of disease, health education, and bedside nursing of sick at home.

3. Board: The governing board consists of 6 men and 7 women.

4. Territory: An urban territory with a population of approximately 38,917.

5. Staff: Doctors: 1 supervisor, 9 volunteer. Nurses: 1 director, 1 supervising, 3 staff. Clerical assistant: 1.

6. Type of work: The association gives bedside nursing to all the sick, and in addition clinics are maintained for infants and children. A Health Center is maintained for infants. Little Mothers' League classes are also conducted.

7. Financial: The budget for the year is \$7,407.10. The association is supported by the community chest, appropriations and donations. Fees are regulated for each patient.

8. General statement: During the year 7,166 visits were made by the nurses, and 25 patients were sent to the hospital.

## A. JACOBI HOSPITAL FOR CHILDREN, SOCIAL SERVICE, INC.

### New York City

1. Organized May 1, 1918.

2. Aim: After-care and health education of children who have been patients in the hospital and clinics; care also of other members of the family.

3. Board: The governing board consists of 4 men and 14 women.

4. Territory: The organization serves the entire city.

5. Staff: Doctors: 1 director, 6 volunteers. Social service workers: 1 director who is a nurse, 4 full time, 12 part time. Nutritionists: 1 director, 1 full time, 3 part time. Volunteer clerical assistants: 3. Other volunteers: 10.

6. Type of work: Hospital care, home visiting, clinics and health centers are maintained. Special care is given tubercular, maternity, venereal disease, and nerve cases. The work is both preventive and educational.

7. Financial: The budget for the year was \$7,420.69. The organization is supported by membership dues, contributions and rummage sales.

8. General statement: A class for correctional exercises has been started, which is attended by the older children of the nutrition clinic and by others from the various departments of the dispensary. During the year 2,930 home visits and investigations were made by the nurses and doctors; 111 cases were placed under hospital care.

## CHILD WELFARE LEAGUE OF AMERICA

### New York City

1. Organized 1921.

2. Aim: 1. The better understanding of child welfare problems. 2. The formulation and improvement of standards and methods of the different forms of work with children. 3. The making available for all of its members the assured results of successful effort in any part of the field. 4. The development of inter-society service.

3. Board: The governing board consists of 14 men and 8 women.

4. Territory: The league serves the United States and Canada.

6. Type of work: The work of the league is largely educational and for the purpose of standardization.

7. Financial: The total estimated budget for the current year is \$22,200. The league is supported by an appropriation from the Commonwealth Fund, and by membership dues.

8. General statement: The membership of the bureau includes 65 agencies representing private societies which place children in foster homes either free, at board, or for adoption; children's protective agencies and public departments of child care.

## FEDERATION FOR CHILD STUDY

### New York City

2. Aim: To provide an educational program based on recreation; to stimulate and establish desirable health habits; to help solve the problem of proper food for the summer.

5. Staff: Supervisor, consulting physicians, 2 assistants, and dietitians.

6. Type: Most of the hygiene work of the federation is done in the summer schools. They provide all-day care from about 8.30 A. M. to about 5 P. M. Three months before the play schools open the children are examined and remedial defects removed. Daily morning health inspection, daily showers, habits of scrupulous cleanliness and health messages to the home are the minimum aims of the federation. At the Ethical Culture Play School, the weekly health lesson centers about the problem of furnishing one of the rooms; the work is supplemented with posters, cut-outs, health songs, tooth brush drills, etc. Special care is given to the malnutrition class which consists of selected children. There is a children's canteen in charge of expert dietitians. In the recreational activities training in habit and character formation, dancing, sewing and cooking, cobblery, printing and shop work, as well as story-hour, choral work, library periods, dramatics, arts and crafts, and nature study make up the busy day.

8. General statement: Children's councils aid in the management of each school. A central council consisting of delegates from each school meets regularly to give expression to the aims of the children of the Play Schools. The schools try to get their messages to the homes of the children. The Summer Play Schools are helping to usher in a fuller, richer and happier school life for the children.

## GREENWICH HOUSE HEALTH CENTER

### New York City

1. Organized 1918.

2. Aim: To conduct educational health work. To improve the health of neighborhood.

5. Staff: Directress of settlement house. Medical and social supervisor. Doctors: Chairman of Medical Committee, 6 part time, 2 of whom are volunteers. The American Red Cross supervises the dental service. Dentists: 2 part time.

Oral hygienist: 1. Social workers: 1 full time, 20 part time. Nutritionists: 1 director, 2 full time, 2 volunteers. Clerical assistant: 1. Volunteer workers: 5.

6. Type of work: Home visiting, clinics, and health centers are maintained. Since the work is confined to preventive and educational measures, only minor ailments are treated and feedings adjusted. Cooperation with hospitals and family physicians is established for all other treatment.

7. Financial: The budget for the year was approximately \$7,020. The center is supported by contributions. The directress of the settlement makes personal appeals. Fees are regulated for nursing care.

8. General statement: The average attendance of the cardiac class is 50. The children attend from 9:00 A. M. to 4:30 P. M. There are 2 full-time men teachers and 2 part-time women teachers. In addition, the children have lessons in sewing, cobbler, arts and crafts, dramatics and singing. They have quiet games on the roof and athletics in the gymnasium.

### HENRY STREET VISITING NURSE SERVICE

#### New York City

1. Organized 1893.

2. Aim: To give trained nursing service to the sick in their homes; instruction in personal hygiene, sanitation and the prevention of disease; and to solve related social and economic problems.

3. Board: The governing board consists of 9 men and 4 women.

4. Territory: An urban territory with a population of 5,621,151 is served.

5. Staff: Director of medical service. Educational director. Nurses: 1 general director, 30 supervising, approximately 230 staff nurses, including graduate and undergraduate students, 5 doing clerical work. Statistician: 1. Social workers: 2. Clerical assistants: 20.

6. Type of work: Home visiting, clinics, classes and health centers are maintained, particularly for mothers and children. Educational and preventive work are given special attention. Cardiac cases receive care, and all ages are served.

7. Financial: The total budget was \$375,000. The organization is supported by contributions, returns from nursing service, and income from investments. Fees are adjusted to family circumstances.

8. General statement: During the year 345,466 visits were made by the nurses; 42,470 patients were given home care. The infant mortality rate for infants under 1 month of age was 17 per 1,000 cases.

### JOHN E. BERWIND MATERNITY CLINIC

#### New York City

1. Organized 1901.

2. Aim: To deliver the deserving poor in their homes and to hold prenatal clinics for the women and to care for their babies during the first year of life.

3. Board: The clinic is governed by a board of 5 men.

5. Staff: Doctors: 4 resident and 4 attending physicians. Consultants: 2.

6. Type of work: Home visiting and clinics are conducted. Maternity care and pediatrics are the chief interest.

7. Financial: The clinic is supported by Mr. Berwind. A small fee is asked of those who can afford to pay for the cotton and gauze used.

### JUDSON HEALTH CENTER

#### New York City

1. Organized January 12, 1921.

2. Aim: To minister to health needs of the district and to educate in preventive measures by clinics and through field work of nurses, dietitians and social workers.

3. Board: The governing board consisted of 21 men and 5 women, but there were 4 vacancies to be filled at the last election.

4. Territory: The territory covered is urban with a population of approximately 33,737.

5. Staff: Executive secretary. Doctors: 1 supervisor, 16 volunteer. Nurses: 2 directors of service, 2 supervising, 8 staff. Dentists: 1 supervisor, 4 part time. Social service workers: 1 supervisor, 3 full time. Nutritionists: 1 supervisor, 2 assistants. Clerical assistants: 4.

6. Type of work: Home visiting clinics and health centers are maintained, particularly for mothers and infants. Visual, dental, cardiac, orthopedic and venereal disease patients are cared for, and preventive and educational work is conducted. All ages are served.

7. Financial: The total budget for the year was \$53,000. The center is supported by membership dues, contributions and fees.

8. General statement: Several factors influence the work. The population is almost entirely Italian. There are no other health agencies in the district. The baby death rate in the 1920 census was 95 as compared with 85 for city at large. Treatment paves the way for education in preventive measures. The district is badly congested and the tenements are in bad condition.

### MATERNITY CENTER ASSOCIATION

#### New York City

1. Organized April, 1918.

2. Aim: The extension of prenatal facilities; coordination and standardization of the work of all agencies engaged in maternity care; improvement in the obstetrical care of the parturient woman at time of delivery.

3. Board: The governing board consists of 4 men and 42 women.

4. Territory: An urban territory with an approximate population of 12,000 is served.

5. Staff: General director. Doctors: Chairman of Medical Advisory Board, 2 full time, 1 part time. Nursing: director of field service, assistant director, 1 special, 20 staff, 7 clerical. Number of volunteer workers varies.

6. Type of work: Home visiting, clinics, classes and health centers are maintained for maternal, prenatal and postnatal patients as well as for infants. The association acts as an educational center for the entire country in popularizing the need for prenatal care and in demonstrating the possibilities of life-saving through intensive prenatal work.

7. Financial: The total budget for the year was \$87,171.40. The association is supported by voluntary contributions. Fees are adjusted to family circumstances.

8. General statement: The association in its reconstructed plan of work evolved a program for the distribution of its activities which must naturally demand reorganization and changes in application until to-day, while local in administration and support, its scope has become not only national, but in a measure international.

### MULBERRY COMMUNITY HOUSE

#### New York City

1. Organized June 2, 1920.

2. Aim: To do community work.

3. Board: The governing board consists of 12 men and 3 women.

4. Territory: The organization serves an urban territory with a population of 38,268.

5. Staff: The staff consists of 7 full-time workers and 2 part-time workers.

6. Type of work: The work consists of social clubs and educational classes for men and women, working boys and girls, school boys and girls.

7. Financial: The total budget for the year was \$18,000. The organization is supported by voluntary contributions.

**NATIONAL CHILD WELFARE ASSOCIATION**

New York City

1. Organized 1912.
2. Aim: To direct public interest to the physical, mental and moral welfare of children.
3. Board: The association is governed by a board of 10 men and 5 women.
4. Territory: The work of the association is national in scope.
5. Staff: General secretary, extension secretary, associate extension secretary, research secretary, treasurer, and clerical assistants.
6. Type of work: The association prepares and issues for sale posters, pictures, educational panels and other graphic material for educational and campaigning purposes, in order to promote the best normal development of children.
7. Financial: The association is supported by the sale of exhibit material and literature, by contributions and membership dues.

**NATIONAL FEDERATION OF DAY NURSERIES**

New York City

1. Organized April, 1898.
2. Aim: To unite in one central body all day nurseries, and to endeavor to secure the highest attainable standard of merit.
3. Board: The governing board consists of 16 women.
4. Territory: The scope of the organization is federal and covers every city where there is a day nursery.
5. Staff: Executive secretary and clerical assistants compose the staff. The nurseries have trained nurses and doctors in attendance in most instances.
6. Type of work: The organization is divided into seven subdivisions called centers. To the chairman of each center is delegated the responsibility of keeping the nurseries in their district up to the standard. The work is in the line of hygiene with care for health and dietary, also educational experiments are carried on. The work is primarily with the pre-school child.
7. Financial: The budget for the year was \$1,000. The organization is supported by dues and personal contributions.
8. General statement: It is planned to start a training school for nursery maids in the day nurseries of New York City to be gradually extended to other cities. Also, the ideals and methods of the nursery school are to be adapted to the teaching of children from 2 to 6 years of age.

**NATIONAL LEAGUE OF NURSING EDUCATION**

New York City

1. Organized 1893.
2. Aim: To consider all questions relating to nursing education; to define and maintain in schools of nursing throughout the country minimum standards for admission and graduation.
3. Board: The governing board consists of 13 women.
4. Territory: The work is national in scope.
6. Type of work: The league is concerned with the education of nurses for the country. An important function of the league is its Placement Bureau. During the year this has been a most active department and has formed a medium of exchange for positions between hospitals, schools of nursing and nurses.
7. Financial: The league is supported by membership dues.
8. General statement: The organization has fulfilled in great measure the hope of its founders and the generations of nurses to come will undoubtedly continue to carry forward this work to greater fulfillment. A wonderful spirit of cooperation in all undertakings, however difficult, has been consistently noted during these 28 years.

# NATIONAL ORGANIZATION FOR PUBLIC HEALTH NURSING

## New York City

1. Organized 1912.
2. Aim: To insure to the public the best kind of public health nursing service.
3. Board: The governing board consists of 1 man and 22 women.
4. Territory: The organization serves the United States in a territory that extends from the crowded city tenements to the isolated homes of the country.
5. Staff: General director, associate director, membership secretary, librarian, eligibility secretary, field secretary, educational secretary, vocational secretary, and editor.
6. Type of work: The organization furnishes the nurse and others interested in public health nursing with:
  1. Expert consultation service.
  2. Protection against poor nursing service by upholding the standard for the fundamental technical training of the individual public health nurse.
  3. A monthly magazine, "The Public Health Nurse."
  4. A reference and package library service.
  5. A vocational service, guiding "the right nurse to the right work."
  6. Advisory service as to the postgraduate courses in public health nursing.
7. Financial: The total budget for the year was \$85,000. The organization is supported by voluntary membership and contributions.
8. General statement: What the organization needs:
  1. The continued support of the 7,479 members.
  2. A larger membership from the general public who appreciate the need for high standards in every profession—especially in that of public health nursing which has such an immediate bearing on the health of the people.
  3. A larger enrollment among the nurses.

# NEW YORK ASSOCIATION FOR IMPROVING THE CONDITION OF THE POOR

## New York City

1. Organized 1843.
2. Aim: To provide the following service for families under its care:
  1. General educational nursing.
  2. Prenatal and postnatal care for mothers and babies.
  3. Country outings for tired mothers and anemic children, and a convalescent home for the recovery of mothers after childbirth.
  4. Scientific training in the proper selection and preparation of food.
  5. Medical and nursing care for tuberculous families in their own homes.
  6. An intensive community health program in one of the city's most congested districts.
3. Board: The governing board consists of 40 members.
4. Territory: The work of the association covers the Boroughs of Manhattan and the Bronx, an urban territory with a population of approximately 3,000,000.
5. Staff: General director. Doctors: 4 part time. Nurses: 1 supervisor, 6 supervising, 46 staff. Dentists: 1 director, 1 full time, 4 part time. Director of Department of Family Welfare. Social service workers: 23 Nutritionists: 1 supervisor, 7 full time. Clerical assistants: 53.
6. Type of work: Work of the association includes home visiting, clinics, classes, hospital care and health centers, for mothers and children. Mental disease, tubercular and venereal disease patients are cared for.
7. Financial: The total budget for the year was \$891,085. Voluntary contributions support the association.
8. General statement: The outstanding work of the association during the year 1921 was the property development carried on at Sea Breeze and in Bronx Park to carry family men over the unemployment period.



**NEW YORK COUNTY CHAPTER, AMERICAN RED CROSS, HEALTH SERVICE**  
**New York City**

1. Organized January 12, 1920.
2. Aim: To supplement, coordinate and strengthen existing health agencies.
3. Board: The governing committee is composed of 11 men.
4. Territory: The organization serves the entire county with a population of 2,284,103.
5. Staff: Director of the organization. Doctors: 1 supervisor, 2 part time. Dentists: 1 supervisor, 12 part time. Nutritionists: 1 supervisor, 11 assistants. Clerical assistant, 1. Volunteer workers: 10.
6. Type of work: Home visiting clinics and classes are conducted for children, by means of which preventive and educational work is done. Nutrition classes for undernourished children and dental clinics for school children are features of the work.
7. Financial: The budget for the year was approximately \$24,000. The organization is supported by contributions, and by the annual Red Cross roll call.
8. General statement: During the year 766 patients were enrolled at the clinics, and 2,676 home visits were paid by the nurses. The infant mortality rate for the year was 71 per 1,000.

**SUB-COMMITTEE FOR MOTHERS AND INFANTS, STATE CHARITIES**  
**AID ASSOCIATION**

**New York City**

1. Organized 1872.
2. Aim: The chief object of the organization is to improve the condition of public charitable institutions of New York State. Orphans, foundlings and permanently deserted children, received from public officials and from institutions supported by public funds, are placed in carefully selected permanent free homes, usually in the country. Homeless mothers with infants or small children received from public maternity hospitals, infant and founding asylums and charitable societies are given advice, temporary care, and employment.
3. Board: The governing board consists of 17 men and 9 women.
4. Territory: The work of the organization covers the entire state.
5. Staff: Secretary, nurses, social service workers and volunteer visitors.
6. Type of work: The department receives homeless, unprotected mothers with young babies and finds them employment in good country homes, where they are able to support themselves and their children under wholesome conditions of life and work. Whenever necessary, it provides temporary convalescent care, medical or surgical treatment, an outfit of clothing, or gives any other assistance and advice which will restore the mother to self-support.
7. Financial: The budget for the year was approximately \$281,000. The association is supported by voluntary contributions.
8. General statement: The association promotes measures for the prevention of disease and helps to secure larger and better facilities for the care of the sick throughout the state.

**NEW YORK DIET KITCHEN ASSOCIATION**

**New York City**

1. Organized 1873.
2. Aim: Health conservation and health education with special reference to babies and little children.
3. Board: The association has a governing board of 42 women and an advisory board of 12 men.

4. Territory: The association serves an urban territory.
5. Staff: Director of the association. Doctors: 1 chairman of medical committee, 4 paid physicians, 13 volunteers. Nurses: 1 supervising, 10 staff. Nutritionists: 1 supervising, 1 volunteer. Volunteer clerical assistants: 3. Other volunteer workers vary from 4 to 10.
6. Type of work: Home visiting, clinics and health centers are maintained for maternal and prenatal patients as well as for infants and pre-school children.
7. Financial: The budget for the year was approximately \$47,000. The association is supported by a small endowment, appropriation from the city and contributions.
8. General statement: The most interesting development of work with the pre-school age group was the addition of a corrective exercise or posture class in one of the centers.

## THE PRESBYTERIAN HOSPITAL IN THE CITY OF NEW YORK

### New York City

1. Organized 1868.
2. Aim: To afford medical and surgical aid and nursing to sick or disabled persons of every creed, nationality and color.
3. Board: The governing board consists of 36 men.
4. Territory: The hospital serves Manhattan and the Bronx, and only special cases from the rural districts.
5. Staff: The professional staffs of the hospital consist of professors and other members of the staff of the medical school of the university who are appointed by the hospital on the nomination of the university.
6. Type of work: The hospital treats acute medical and surgical conditions; contagious, chronic, ear, eye, nose, throat, tubercular and obstetrical cases are not admitted. Simple fractures are not admitted.
7. Financial: The total budget for the year was \$837,229. The hospital is supported by voluntary contributions.
8. General statement: The greatest changes during the past year in the medical out-patient department have resulted from the agreement between the board of managers of the hospital and the dispensary development committee, whereby funds have been provided by the development committee and suggestions have been made with a view to enlarging the scope and improving the executive management of the out-patient department. The development committee have generously supplied money for the purchase of supplies and equipment and have paid the salaries of 4 additional members of the clerical force. They have likewise furnished clerical assistance in the form of clinic secretaries in the dental department and in the men's and women's medical. The last named have supplanted the volunteer aides. A few of the volunteer workers still come as individuals and continue to render invaluable assistance, but their organization as such has been discontinued. The development committee also studied the routine management of the clinic and suggested certain changes, particularly with reference to the admitting of patients. As an outgrowth of the above agreement, a new office has been created—that of dispensary executive. Twenty-two thousand seven hundred and thirty-eight persons have experienced the benefits of the hospital during the year. There were treated in the beds of the wards and private rooms of the hospital 4,213 persons. The daily average has been 215. Of the patients in the wards, 26.5 per cent were treated free of charge. There were treated in the out-patient department 14,493 persons, and the daily average visits made were 313. The visiting nurses cared for 4,032 persons, making 21,343 visits.

**RIVERDALE HEALTH LEAGUE****Riverdale-on-Hudson**

1. Organized 1909.
2. Aim: The object of the league is generally community welfare work.
3. Board: The governing board consists of 5 men and 3 women.
4. Territory: The league serves both urban and rural territory with a population of approximately 4,000.
5. Staff: The staff consists of a district worker and a supervisor of medical service.
6. Type of work: Home visiting, clinics and hospital care are maintained for the sick.
7. Financial: The budget for the year was nearly \$4,000. The league is supported by contributions and fees, which are usually voluntary and average about 50 cents.
8. General statement: The number of visits made to the sick were 1,525. This year a car has been added to the equipment, which is a great help. The community in general is interested in welfare work. The visiting nurse covers the field, cooperating with all available agencies in the state.

**THE TUBERCULOSIS AND PUBLIC HEALTH ASSOCIATION OF ROCHESTER AND MONROE COUNTY****Rochester**

1. Organized November, 1917.
2. Aim: To promote and carry on such educational, preventive and relief work as shall contribute to the improvement of health—with special emphasis on the prevention and control of tuberculosis.
3. Board: The governing board consists of 10 men and 1 woman.
4. Territory: The association serves an urban territory with a population of 295,750, and a rural territory with a population of 50,000.
5. Staff: Executive secretary. Doctors: 1 supervisor, 8 part time. Nutritionists: 1 supervisor, 5 assistants. Occupational therapist: 1, who visits the tubercular patients and supervises the curative workshop. Clerical assistants: 3.
6. Type of work: Preventive and educational work for adults and children, and nutritional classes for children form the main part of the work.
7. Financial: The budget for the year was \$28,900. The association is supported by appropriations from the city and county, and by the sale of Christmas seals.
8. General statement: Half of our appropriation for education work goes to benefit children through child health education. Nutrition work is an important department of our work and receives about one-third of our annual appropriation.

**CHILD HEALTH COMMITTEE OF SYRACUSE (formerly CHILD WELFARE COMMITTEE)****Syracuse**

1. Organized September, 1918.
2. Aim: Educational, constructive and preventive health work; to assist in the reduction of infant mortality, and to teach more efficient methods in the care of mothers during prenatal state, and care of the child after birth. To cooperate with other agencies dealing with child life.
3. Board: The board consists of 12 men and 21 women.
4. Territory: The committee serves an urban territory with a population of 171,647.

5. Staff: Executive officer, who is also the supervisor of nursing service. Doctors: 1 supervisor, 6 part time. Nurses: 1 special supervising, 5 staff. The Junior League is organized to do the volunteer work.

6. Type of work: Home visiting and clinics for prenatal patients and infants are conducted. Preventive work is carried on through clinics and home visiting. Health centers are maintained for infants.

7. Financial: The budget for the year is approximately \$7,200. The organization is supported by subscriptions and by the community chest.

8. General statement: A cardiac clinic for school children is being planned. During the year 11,566 visits were made by the nurses, and 2,946 patients visited the clinics.

### VISITING NURSE ASSOCIATION OF SYRACUSE

#### Syracuse

1. Organized: Incorporated in 1895.

2. Aim: Nursing and teaching in the homes of the poor and those of moderate means.

3. Board: The governing board consists of 35 women.

4. Territory: An urban territory with a population of 171,647 is served, and in addition a rural territory the population of which is unknown.

5. Staff: Supervisor of the association. Nurses: 1 supervisor, 1 general supervising, 14 staff. Clerical assistants: 2.

6. Type of work: Home visiting and clinics are provided for prenatal, obstetrical and postnatal patients, and for children; all ages are served, however.

7. Financial: The budget for the year was approximately \$22,000. The association is supported by the community chest and membership dues. Fees are charged occasionally.

8. General statement: A hospital camp for sick babies is maintained during the summer for a period of four months. To this camp children under three years of age are admitted.

### BABY WELFARE COMMITTEE OF UTICA, INC.

#### Utica

1. Organized 1912. Incorporated 1915.

2. Aim: To reduce the infant mortality of Utica and to increase the health and vitality of its children.

3. Board: The governing board consists of 28 women.

4. Territory: The organization serves an urban territory with a population of 94,136.

5. Staff: Doctors: 1 director, 7 part time, 2 of whom are volunteer. Nurses: 7 staff.

6. Type of work: Home visiting, clinics and classes are conducted for infants and pre-school children. A health center for infants is maintained and home visiting and clinics are provided for maternal patients. Little Mothers' Leagues are organized.

7. Financial: The total budget for the year was \$14,000. The organization is supported by an appropriation from the city, community chest, and an Annual Spring Drive.

8. General statement: During the year 6,844 patients visited the clinics, and 25,281 visits were made by the nurses.

## NORTH CAROLINA

### THE CASWELL TRAINING SCHOOL

#### Kinston

2. Aim: Treatment of mental defectives.
3. Board: The school is governed by a board of 8 men and 1 woman.
4. Territory: The work of the school covers the entire state of North Carolina.
5. Staff: Superintendent. Assistant superintendent who is also medical director. Doctors: 2 full time. Nurses: 1 supervisor, 2 staff. Dentist: 1 part time. Clerical assistants: 3.
6. Type of work: There are clinics, hospital and research work for mental defectives.
7. Financial: The total budget for the year was \$80,000. The school is supported by state appropriation.

## BUREAU OF MATERNITY AND INFANCY, STATE BOARD OF HEALTH

#### Raleigh

1. Organized April 1, 1922.
2. Aim: The promotion of the welfare of maternity and infancy.
3. Board: The governing board consists of 9 men.
4. Territory: The bureau serves both urban and rural territory with a population of 2,556,486.
5. Staff: Director of the bureau: a chief of the division of nursing, and a chief of the division of infant and maternal information.
6. Type of work: Educational, through the medium of distribution of literature and individual contact through the medium of restricted county units in charge of specially trained public health nurses.
7. Financial: The total budget for the year was \$50,000. The bureau is supported by the state and federal governments.
8. General statement: In addition to the budget quoted above and to still further enlarge the funds expended in the work, counties are required to match the joint state and federal funds in the development of special county units.

## OHIO

### THE CANTON DAY NURSERY ASSOCIATION

#### Canton

1. Organized April, 1917.
2. Aim: To care for small children during the day while their mothers are at work away from home. Also to care for children temporarily sent to the nursery by the court or the Associated Charities.
3. Board: The governing board consists of 15 women.
4. Territory: The work of the association covers the city, a population of 87,091.
5. Staff: The staff consists of an executive of the association; a supervisor of medical service, and volunteer workers.
6. Financial: The total budget for the year was \$7,000. The association is supported by the community chest. A fee of 5 cents per day is charged each child.

# **PUBLIC HEALTH FEDERATION**

## **Cincinnati**

1. Organized 1917.

2. Aim: The coordination of public health activities and of public and private agencies. To serve as a forum for frank discussion of health problems, policies and plans; to develop new, and to improve present standards of service through the study of special problems; to secure the active support of the general membership of the member agencies of the federation for the measures agreed upon by the coordinating committee.

3. Board: The governing board consists of 20 men and 3 women.

4. Territory: The work of the federation covers the city and county, which has an urban population of 401,247 and a rural population of 61,153, making a total population of 462,400.

5. Staff: The staff consists of the executive secretary, an educational director and the assistant secretary.

6. Type of work: The federation operates through divisional councils on the important phases of health. The federation has the following divisional councils: Cancer control, child hygiene, hospitals, housing, industrial health, mental hygiene, nursing, recreation, social hygiene, tuberculosis.

7. Financial: The total budget for the year was \$12,086. The federation is the health branch of the Council of Social Agencies and is financed by the community chest.

8. General statement: The work accomplished by the federation during the year independent of any individual council, includes the follow-up of incoming immigrants, survey of hospital facilities for children, publication of a bulletin including an information service for cooperating agencies, maintenance of a speakers' bureau calling together of interested organizations to decide upon a unified policy in regard to Longview Hospital, attempt to safeguard the State Health Department at the time the reorganization bill was before the legislature, and finally, the undertaking of the Cincinnati Health Exposition, an achievement so worth while that its history has been published as a special Exposition Number of the Medical Bulletin of the University of Cincinnati. The strength of a union of activities is due to the fact that in this way as in no other the cooperation of the physicians of a community and those interested in social medicine is brought about.

# **THE PROTESTANT HOME FOR THE FRIENDLESS AND FOUNDLINGS**

## **Cincinnati**

1. Organized 1855.

2. Aim: To provide a maternity and rescue home for unmarried mothers, and married women unable to pay for their care during confinement; also a home for the offspring of unmarried mothers.

3. Board: The governing board is composed of 17 men and 17 women.

4. Territory: The institution serves an urban territory.

5. Staff: Matron of home. Doctors: supervisor of service, 15 volunteers. Nurses: 2 supervising, 4 staff. Dentists: 1 supervisor, 1 part time.

6. Type of work: Hospital, prenatal and obstetrical cases as well as infants to one year of age, receive care.

7. Financial: The total budget for the year was \$25,000. The organization is supported by the community chest, membership dues and small fees regulated for each case.

8. General statement: During the year 280 patients were given hospital care. In the nurseries care has been given to 110 infants. There have been no deaths of mothers, or of babies born in the home. All cases are submitted to Wasserman tests and no venereal disease cases are kept in the institution. They are referred to the Cincinnati General Hospital for treatment.

**BUREAU OF CHILD HYGIENE, DIVISION OF HEALTH****Cleveland**

1. Organized 1911.
4. Territory: Entire state.
8. General statement: The age limit for child hygiene clinics is under school age, but most of the cases are under 15 months. New cases attending child hygiene clinics were 6,379 as compared with 4,958 for 1920, an increase of 61 per cent. The total visits at clinics were 46,995 as compared with 30,288 for 1920, an increase of 55 per cent. The infant mortality rate was 74.

**CATHOLIC CHARITIES BUREAU****Cleveland**

1. Organized April, 1911.
2. Aim: To provide a central office of all Catholic charities of the Diocese of Cleveland.
3. Board: The governing board consists of 9 men.
4. Territory: Cleveland diocese.
5. Staff: Director of bureau, assistant director, supervisor of placements, and record clerk.
7. Financial: The total budget for the year is \$12,000. The bureau is supported by the community chest.
8. General statement: The bureau supervises child-bearing institutions and hospitals.

**CHILDREN'S BUREAU****Cleveland**

1. Organized April 1, 1921.
2. Aim: To investigate and plan for each child seeking admission to a child-caring agency or institution in Cleveland, furnishing the social facts to their admission committee; supervising families of admitted children and planning for their return to own family, or to normal family life.
3. Board: The governing board consists of 12 men and 32 women.
5. Staff: Executive secretary; 1 case supervisor, 16 case workers; 3 stenographers.
6. Type of work: The bureau does case work with children either placing them in institutions or doing follow-up work in their own homes.
7. Financial: The budget for the year was \$36,320. The bureau is supported by the community chest.
8. General statement: The organization is a central planning and inquiry bureau for Cleveland's needy children, particular emphasis being placed upon investigation before placement in institutions. An old children's institution has been reorganized into a special mental diagnostic clinic.

**CLEVELAND ASSOCIATED CHARITIES****Cleveland**

1. Organized 1900.
2. Aim: To develop family life through securing for each family from the community full opportunity for health, education, work, play and spiritual influence, initiating mass reform movements, and aiding in their application to individuals.
3. Board: The governing board consists of 19 men and 7 women.
4. Territory: The organization serves an urban territory with a population of 796,836, and a rural territory with a population of 31,222.

5. Staff: General secretary and an assistant general secretary, who supervises the social work. Social workers: 93 full time, 13 part time, of whom 4 are home economists. Clerical assistants: 43. Volunteer workers: 5.

6. Type of work: Preventive and educational work are carried on for all the members of the family. It is an organized effort to reduce poverty, disease, ignorance, vice and crime, by dealing with the greatest single cause of all misery — the unhappy, improperly functioning home. Prevention is sought as well as cure. Nutrition classes are also conducted.

7. Financial: The total budget for the year was \$678,000. The organization is supported by special contributions and the community chest.

8. General statement: In addition to the general preventive work done by all workers, there are the home economists, who do more intensive health work. Through their special training in dietetics, they are able to give mothers needed lessons in the selection of right foods, the proper balance of diet, sick diet needed by certain children, and the proper way of preparing food. In addition to working with individual families and advising other workers on matters of food, the home economist does follow-up work with the mother in the home, in addition to the work with children and their mothers in class.

## CLEVELAND DAY NURSERY AND FREE KINDERGARTEN ASSOCIATION

### Cleveland

1. Organized 1882.

2. Aim: To maintain day nurseries for the children of women obliged to assume the support of the family. To conduct free kindergartens, to provide medical inspection and dental care, to operate a training school for kindergarten and primary teachers.

3. Board: The association is governed by a board of 7 men and 50 women.

4. Territory: The territory covered is urban with a population of approximately 796,836.

5. Staff: Executive of the association. Doctors: 1 supervisor, 1 part time. Social workers: 1 supervisor, 9 assistants. Clerical assistants: 2. Volunteer workers: 40.

6. Type of work: Home visiting and clinics for pre-school and school children are maintained.

7. Financial: The total budget for the year was \$81,840. The association is supported by community funds, endowments and special contributions. Fees are regulated.

8. General statement: Owing to unemployment the home conditions of our children have been very poor. Consequently we have specialized in nutrition work during the past year for the children while with us and also through instruction to the mothers in regard to home feeding. Plans for a summer nursery for children are under way and the opening of such an institution should be our outstanding piece of work for the coming year. The total attendance for the nurseries and kindergartens for the year was 85,867. The number of children receiving dental care was 232. Operations for tonsils and adenoids were 79.

## CLEVELAND HUMANE SOCIETY

### Cleveland

1. Organized April 3, 1873.

2. Aim: To protect children and dumb animals from cruelty and neglect; to provide free wage, boarding and adoptive homes for homeless children.

3. Board: The society is governed by a board of 9 men.

4. Territory: An urban territory with a population of 796,841 is served, and a rural territory with a population of 46,654.



5. Staff: General agent, secretary to agent, field secretary, receiving secretary, attorney, director of child placing and supervision, supervisor of boarding homes, home-finding supervisor, supervisor of department for unmarried mothers, supervisor of training class, medical case worker, 1 part-time physician, 26 visitors, 3 investigators, 1 bookkeeper, 2 clerks, 5 stenographers, 1 filing clerk, 1 buyer for clothing department.

6. Type of work: The work includes child protection (protection of children from medical, moral and physical neglect), desertion and non-support; the effects of illegitimacy, cruelty and abuse.

7. Financial: The budget for the year is approximately \$190,000. The society is supported through the community fund; also through direct gifts and investments.

8. General statement: In addition to extending protective care to 5,660 children and providing normal home care for 1,800 children, the society supervised 75 children—wards of the state of Ohio—in boarding homes during 1921-1922. All children up to three years of age are given complete physical examination at the babies' dispensary where the diet for children is prescribed. Older children are examined in the dispensaries of the various hospitals of the city; special cases are treated in the special clinics of these hospitals. All boarding homes are supervised by the board of health, who report back to the society and to the State Board of Charities upon the physical condition and environment of the children in the homes.

### RED CROSS TEACHING CENTER

#### Cleveland

1. Organized July 4, 1916.

2. Aim: A wider extension and more diligent dissemination of public health education; the prevention of disease itself and the checking of the spread of disease; the teaching of mothers the best methods of instructing their children in correct health habits; the attainment of having in every home at least one woman familiar with the fundamental principles of health and the care of the sick.

3. Board: The governing board consists of 21 women.

4. Territory: The organization serves an urban territory with a population of 796,836, and a rural territory with a population of 1,022,308.

5. Staff: Director of the organization. Assistant director: 1. Secretary: 1. Nurse instructors: 5.

6. Type of work: The work includes health instruction, home nursing and first aid to the injured.

7. Financial: The total budget for the year was \$19,000. The organization is supported by the community fund.

8. General statement: During the year 2,697 people were reached with health instruction, 939 were reached at summer camps and had individual health lectures, 1,758 had full courses; the average weekly attendance was 1,137.

### EAST CLEVELAND CHILD WELFARE ASSOCIATION

#### East Cleveland

1. Organized May, 1921.

2. Aim: To conduct East Cleveland Babies' Dispensary for children of preschool age.

3. Board: The governing board consists of 4 men and 11 women.

4. Territory: The territory covered is urban with a population of approximately 30,000.

5. Staff: Doctors: 1 supervisor, 2 part time. Nurses: 1 supervisor, 1 staff. Dentists: 1 supervisor, 1 part time. Volunteer workers: 12.

6. Type of work: Home visiting, clinics and health centers are maintained for infants and pre-school children.

7. Financial: The budget for the year was \$5,000. The association is supported by the community chest.

8. General statement: From January 1 to September 1, 1922, 1,466 patients visited the clinic; 1,214 home visits were made by the nurses; 50 patients were given home care.

## THE BABIES' DISPENSARY AND HOSPITAL OF CLEVELAND

### Cleveland

1. Organized 1906.

2. Aim: The object of the society shall be to limit and prevent sickness and mortality among infants and children, and to provide medical and surgical aid and nursing care for sick babies and children.

3. Board: The governing board consists of 12 men and 23 women.

4. Territory: The society serves an urban territory with a population of 796,836 and a rural territory with a population of 943,495.

5. Staff: Medical director, superintendent of nurses, and a general staff of physicians and nurses.

6. Type of work: The work of the babies' dispensary includes the following:

1. "Sick" dispensary for ill infants and children under 14 years of age of needy parents.

2. Ultra-violet ray clinic for treatment of rickets and glandular tuberculosis.

3. Light treatment of otitis media.

4. Vaccination against diphtheria.

5. Physical examination of pre-school children coming to the infant welfare stations of the Department of Health.

6. Salvarsan clinic.

7. Dental clinic for pre-school children.

8. X-ray department.

9. Out-door ward of 24 beds, opened from July 1st to September 15th.

10. Rural infant welfare clinics held from June 1st to October 1st. Ten suburban towns were visited.

11. Responsible for supplying all of the patients coming to the babies' dispensary and to the prophylactic babies' dispensaries of the Department of Health, with milk of various kinds, and for meeting the deficit caused thereby.

12. Training of medical students in pediatrics, by giving to the seniors an opportunity to do active work in the sick dispensary daily for 8 consecutive weeks, and by using the material once per week throughout the year for didactic and clinical lectures to juniors in the fundamentals of pediatrics. In addition, the milk laboratory is used to give the seniors in groups experience in making different foods.

13. Postgraduate training for public health nurses in pediatrics in cooperation with the University District Training Center and with Western Reserve University.

14. Postgraduate experience in pediatrics for physicians in Cleveland who wish to improve their training in this field.

15. Preventive infant feeding.

7. Financial: The total budget for the year was \$90,363. The society is supported by the community fund, direct contributions, fees, endowment.

**THE CHILDREN'S FRESH AIR CAMP AND HOSPITAL OF CLEVELAND****Cleveland**

1. Organized 1889.
2. Aim: To receive, care for, nurse, treat medically and provide generally for weak, sick, indigent children, and to give needed instruction to their mothers.
3. Board: The governing board consists of 19 men and 6 women.
4. Territory: The organization serves an urban territory with a population of 796,836.
5. Staff: Superintendent of the organization. Doctors: 1 supervisor, 1 part time. Nurses: 1 supervisor, 1 general. Dentists: 1 supervisor, 1 part time. Clerical assistant: 1. Volunteer workers: 2.
6. Type of work: Hospital care is offered to children from 6 to 12 years of age.
7. Financial: The budget for the year was \$42,274. The organization is supported by the community chest, endowment funds, private contributions, and fees, which are regulated for each patient.
8. General statement: During the year 320 patients were given hospital care. Public school and health classes are conducted at the institution.

**THE CLEVELAND MOUTH HYGIENE ASSOCIATION****Cleveland**

1. Organized 1912.
2. Aim: To educate the public in the hygienic value of healthy mouths and sound teeth, and to furnish instructions as to the best methods of securing the same; to prevent dental caries by oral prophylaxis and by the care and preservation of the temporary teeth; to investigate the cause and to study the prevention of dental caries and other oral diseases; to remedy so far as possible existing conditions of dental caries and other oral diseases; to establish and promulgate a high standard of dental asepsis; to establish, promote and maintain dispensaries; to advocate local, state and national legislation in the interest of public health. To acquire, lease or hold such real estate as shall be desirable for the accomplishment of the main purposes herein and to do all other things that are necessary and incidental for the promotion of public health and the proper conduct of the affairs of the organization.
3. Board: The governing board consists of 14 men and 5 women.
4. Territory: The association serves an urban territory with a population of 796,836, and a rural territory with a population of approximately 1,000,000 (but no attempt is made to cover the entire county).
5. Staff: Director of the association; secretary; 3 dentists, 3 assistants.
6. Type of work: Dental service for children as a demonstration of its value and for immediate relief of suffering. Educational work with the children and their parents; and, especially with institutions and their governing bodies.
7. Financial: The budget for the year was \$18,000, plus earnings. The association is supported by the community fund through the Welfare Federation of Cleveland.

**THE CLEVELAND PROTESTANT ORPHAN ASYLUM****Cleveland**

1. Organized January 22, 1852. Incorporated February 22, 1853.
2. Aim: The purpose of the institution is to gather in homeless and dependent children, such as are sound in body and mind and prepare them for homes, either with relatives, friends or foster parents.
3. Board: The governing board of managers consists of 15 women, assisted by an auxiliary board of 7 women. There is also a board of trustees consisting of 5 men of prominence in the community.

4. Staff: Superintendent, assistant superintendent, matron visitor, physicians, nurse and clerk.

5. Type of work: Children 2 years of age, who come under the control of the institution for placement in foster homes, are boarded out in private families, those from 2 to 6 years of age are sheltered in the nursery department of the institution. The clinic at the institution supervises the weighing, charting and dieting of the underweight children. The hospital is equipped for children who need special care for slight ailments. The children are sent to a summer camp during vacation, this is a big factor in the pursuit of better health.

6. Financial: The institution is fortunate in having an endowment, but receives no income from the state, county or city.

7. General statement: The outstanding feature in the work of the medical department has been the absence of diphtheria, not a single case having occurred among the children during the year. This gratifying experience has been no doubt due to the systematic use of toxin-antitoxin, every child receiving three doses intramuscularly, during its stay in the observation department. In addition, throat cultures are taken and several carriers have been detected and isolated. The city health officials have been very helpful in their cooperation in the control of these cases. It is a reasonable hope that this dread disease has been conquered in so far as the institution is concerned. Advantage has been taken during the year of recent studies in the prevention of goitre.

### THE FEDERATION OF THE JEWISH CHARITIES OF CLEVELAND Cleveland

1. Organized 1904.

2. Aim:

1. To eliminate indiscriminate and unauthorized forms of solicitation, ticket selling, bazaars, fairs.

2. To assure the community a fair and equitable distribution of the funds collected, to the end that the greatest number may benefit in the largest measure possible.

3. To insure to the public a full and detailed accounting of the central body and the constituent organizations.

4. To enable the institutions to give their full time and attention to the work before them.

5. To investigate proposed philanthropic undertakings and advise as to their necessity or merit.

6. To represent for the community an organized effort for good.

3. Board: The board of trustees shall consist of trustees-at-large and representative trustees. There shall be 15 trustees-at-large elected by the federation members from their own number; and there shall be one representative trustee for each of the affiliated organizations, nominated by the trustees of the organizations, from their own number and elected by the federation members.

4. Territory: An urban territory with a population of approximately 796,836 is served.

5. Type of work: The federation obtains funds for the maintenance in whole or in part for practically all of the Jewish charity organizations of Cleveland.

6. Financial: The total budget for the year was \$406,437.50. The federation is supported by the community fund.

### THE SALVATION ARMY RESCUE MATERNITY HOSPITAL AND NURSERY Cleveland

1. Organized March, 1892.

2. Aim: To care for wayward and unfortunate girls and their dependent children.

3. Board: The hospital is governed by a board of 6 men and 1 woman.

4. Territory: The work of the organization covers the entire state.
5. Staff: Superintendent. Doctors: 1 supervisor, 3 volunteers. Registered nurse: 1 supervising.
6. Type of work: Hospital care is provided for girls who come to us in a pregnant condition.
7. The budget for the year was \$7,220. The organization is supported by the Federation of Philanthropy. Fees are regulated for each patient.

### THE VISITING NURSE ASSOCIATION OF CLEVELAND

#### Cleveland

1. Organized 1903.
3. Board: The association is a member of the Cleveland Welfare Federation, a Corporate Member of the National Organization for Public Health Nursing and The National Conference of Social Work.
4. Territory: The territory covered is urban with a population of approximately 796,836.
5. Staff: Superintendent of the association, an associate superintendent, nurses, clerical assistants.
6. Type of work: Home visiting and clinics are conducted.
7. Financial: The budget for the year is \$108,934.22. The association is supported by donations, endowments, miscellaneous revenue and fees.
8. General statement: During the year the association came in contact with 10,836 patients; 79,671 visits were made. The working visits this year exceeded the total calls for the year 1920. A closer relationship has been established with the day nursery associations. In addition to visiting the nurseries on different days, a system of follow-up work is maintained for their sick absentees.

### INSTRUCTIVE VISITING NURSE ASSOCIATION

#### Columbus

1. Organized 1898.
2. Aim: To give to the poor and those of moderate means the best home nursing possible under existing conditions; to promote the better care of infants and to give instruction in the laws of hygiene.
3. Board: The governing board consists of 1 man and 29 women.
4. Territory: The association serves an urban territory with a population of 237,031.
5. Staff: Superintendent. Nurses: 1 director, 5 supervisors, 14 staff. Clerical assistants: 2.
6. Type of work: Home visiting, child welfare stations and prenatal clinics are conducted, as well as nutrition, preventive and educational work.
7. Financial: The budget for the year was \$36,890.01. The association is supported by appropriations, membership dues, donations, fees and miscellaneous revenue.
8. General statement: During the year 8,343 patients were visited, 2,657 more than last year; 255 children were in the nutrition classes, with an attendance of 2,084; 4,058 adults and babies visited the clinics and weighing stations, 1,214 more than in 1920; with a total attendance of 15,618, 9,007 more than in 1920. The staff made a total of 50,401 visits, or 12,709 more than in 1920.

### OHIO SOCIETY FOR CRIPPLED CHILDREN

#### Elyria

1. Organized May, 1919.
2. Aim: The care, cure and education of the crippled child.
3. Board: The governing board consists of 53 men.

4. Territory: The work of the society covers the state, both urban and rural with a combined population of 6,000,000.

5. Staff: The staff consists of an office secretary, public health nurses and clerical assistants.

6. Type of work: District centers are being established with facilities for handling the crippled child.

7. Financial: The society is supported by the Rotary clubs and by state appropriation.

8. General statement: The active membership of the society is confined to members of Rotary, working in harmony with all agencies that have been or are being established for the benefit of the crippled child, keeping in mind always that the duty of Ohio is not to any particular section, but to all Ohio, and that the crippled child in one county should have as good a chance as the crippled child in some other county. The foundation has been laid and a start made in a work almost altogether neglected previously. If this plan is successful in Ohio, there is no reason why, with the great power of International Rotary, the entire United States should not be worked out on the Ohio plan of taking facilities to the child and not the child to the facilities.

### THE TOLEDO DISTRICT NURSE ASSOCIATION

#### Toledo

1. Organized 1901.

2. Aim: To provide home nursing for the sick of Toledo.

3. Board: The governing board consists of 21 women.

4. Territory: The territory served is urban with a population of approximately 243,109.

5. Staff: Doctors: 1 supervisor, 35 volunteers. Nurses: 1 supervisor, 3 supervising, 33 staff. Dentists: 1 supervisor, 1 full time, 2 part time, employed by the board of education. Social worker: 1. Nutritionists: 2. Volunteer workers: 9.

6. Type of work: Home visiting and clinics form the greater part of the work. Mothers and infants are cared for particularly. Obstetrical cases, mental, cardiac, orthopedic, tubercular and occupational therapy patients are served. Preventive and educational work is emphasized.

7. Financial: The total budget for the year was \$81,430. The association is supported by the community chest and fees.

8. General statement: In addition to the usual activities the association hopes to increase the nutritional work and add a worker to do follow-up work on infantile paralysis, as well as work in a posture clinic. School work is under the supervision of the board of education.

### INFANT WELFARE DEPARTMENT OF VISITING NURSE ASSOCIATION

#### Youngstown

1. Organized 1916.

2. Aim: The object of the Visiting Nurses' Association is, first, to give skilled nursing to the sick in their own homes; second, to teach personal hygiene, cleanliness, and the prevention of disease.

3. Board: The governing board consists of 30 women.

4. Territory: The association serves an urban territory with a population of 132,358.

5. Staff: Superintendent. Nurses: 5 staff.

6. Type of work: Visiting and instruction in the home; 6 welfare stations are maintained.

7. Financial: The budget for the year was \$31,780.46. The association is supported by the community corporation.

8. General statement: Only graduates of schools giving general training are eligible as visiting nurses. The nurses are for the use of the public, and it is desired that physicians and others interested in the sick, shall send for them. The association furnishes nurses to all persons unable to pay for their services; also to persons wishing hourly visits. Nurses are authorized to collect a fee from those able to pay for their services.

There has been a marked increase in the maternity work of the association through the year, 715 mothers and 727 new babies as compared with 609 mothers and 625 new babies of the previous year, received care. There were 12 deaths among the new babies, or about 2 per cent. One very encouraging feature of this work is the interest displayed on the part of the expectant mother herself, which is shown by the larger increase in calls received for a visit by the nurse, before date of confinement, 384 such calls as compared with 243 of the previous year were received. A total of 3,190 patients have received care; 29,668 visits were made by the nurses during the year. The average cost of each visit made by the nurses has been 85 cents while only an average of 28½ cents has been collected. Advisory and nursing visits have been made to the free kindergartens and day nurseries of the city at the call of those in charge. A number of talks and demonstrations have been given by the superintendents to groups of mothers. Through the use of the automobiles, 55 persons have been taken to the dispensaries.

## OKLAHOMA

### OKLAHOMA PUBLIC HEALTH ASSOCIATION

#### Oklahoma City

1. Organized April 23, 1917.
2. Aim: To provide health education.
3. Board: The association is governed by a board of 34 men and 6 women.
4. Territory: The work of the association covers both urban and rural territory with a population of 2,000,000.
5. Staff: State secretary, director of school educational work. Nurses: 1 supervising, 3 full time. Clerical assistants: 2.
6. Type of work: Home visiting and clinics for maternal, prenatal, and post-natal patients and for infants and children are maintained. Preventive and educational work are the main features of the service. Health centers are also maintained.
7. Financial: The total budget for the year was \$40,000. The association is supported by membership dues and the sale of Christmas seals.
8. General statement: A report of the association would be incomplete without referring to the work accomplished by the late state secretary. None can doubt it was Jules Schevitz, a young man of 24 years, advised and ably supported by older men, who built the Oklahoma Public Health Association, having built in little more than 4 years one of the most powerful state associations in the nation. His achievement is so worth while that its history has been published in a special memorial issue of the Oklahoma Health Champion.

### TUBERCULOSIS SOCIETY OF OKLAHOMA CITY

#### Oklahoma City

1. Organized March, 1918.
2. Aim: Health education and the prevention and limitation of tuberculosis.
3. Board: The governing board consists of 11 men and 5 women.
4. Territory: The society covers an urban territory with a population of 91,258 and a rural territory with a population (including county towns) of 35,000.
5. Staff: Executive secretary. Doctors: 1 supervisor, 4 volunteers. Nurses: 1 supervisor, 2 full time. Dentist: 1 part time. Clerical assistants: 2.

6. Type of work: Home visiting, clinics, hospital and research work are maintained. Health crusades are conducted in the schools in the country.

7. Financial: The total budget for the year was \$15,970. The society is supported mainly from the sale of Tuberculosis Christmas Seals, and a small per cent from membership dues.

8. General statement: The city nursing and dispensary nursing is carried on by the Public Health Nursing Association.

### TULSA COUNTY PUBLIC HEALTH ASSOCIATION

#### Tulsa

1. Organized 1918.

2. Aim: Health education, prevention of disease and corrective work.

3. Board: The governing board is composed of 25 men and 7 women.

4. Territory: The work of the association covers both urban and rural territory.

5. Staff: Executive secretary. Doctors: 1 supervisor, 3 volunteer. Nurses: 1 supervisor, 4 staff.

6. Type of work: Home visiting and clinics are conducted, particularly for maternal, prenatal, obstetrical, and postnatal patients, and for infants and children. Health crusades are conducted in the county schools.

7. Financial: The total budget for the year was \$18,000. The association is supported by the sale of Christmas Seals and by special contributions.

8. General statement: The affiliated agencies are the Oklahoma Public Health Association and the American Child Hygiene Association.

## OREGON

### COOPERATIVE INFANT WELFARE SOCIETY OF OREGON

#### Portland

1. Organized 1920.

2. Aim: The object of the infant welfare clinics is to lower the infant death rate through health education carried into the home. They furnish places where rich and poor alike can learn the science and art of motherhood.

6. Type of work: The city health department furnishes a list of babies born in the districts covered by the society. The nurse then goes to the home, gives preliminary advice and an invitation to the clinic. The scope of the work has been limited to the first two years of life. A pre-school clinic at each health center is planned for as soon as workers and funds permit. Two annual "Well Baby Weeks" with demonstrations, clinics, health plays, films, charts, lectures, etc. have been decidedly successful. By this means many homes have been reached and it has stimulated requests for clinics from other parts of the city.

During the two year operation of the clinics 655 babies have been registered. The average death rate of the entire city for this period during the first two years of life was 65 per 1,000 births. The proportionate number of deaths among our 655 babies would therefore be 42.5. Deducting 40 per cent for estimated deaths before entering the clinic leaves 25.5 out of the 655 that would therefore be expected to die. The actual number of deaths however has been five, or less than one per cent of the babies enrolled compared with six and one-half per cent among the rest of the babies in the city.

The teaching work done at the clinics includes instruction to mothers, to the senior medical students of the University of Oregon, the County Health Nurses enrolled in the summer session of the School of Social Service of the University of Oregon, the members of the Visiting Nurses Staff, social workers, and the volunteer assistants. A most important thing has been the training of doctors to have charge of other clinics.



8. General statement: The twenty lives which we can statistically claim as saved by our work are perhaps only a small part of the lives really saved. Letters and reports coming from County Health workers and others throughout the entire northwest testify to the largeness and value of the work.

### VISITING NURSE ASSOCIATION

#### Portland

1. Organized 1902 — Incorporated 1913.

2. Aim: To benefit and assist those unable otherwise to secure skilled attendance in time of illness; to promote cleanliness; to teach proper care of the sick, and to initiate and support such activities as may raise the standard of health of this community.

3. Board: The management of the association is vested in a board of nineteen directors.

4. Territory: The work of the association covers the city. Portland is a city of scattered population, making the transportation problem of serious concern. There is also a large floating population which, during the winter months, establishes itself in the outlying districts.

5. Staff: Superintendent. Supervisor of infant welfare work. Nurses: 11. Clerical assistants: 2.

6. Type of work: The work includes home visiting and clinics. The bedside nursing is the first care and includes prenatal, obstetrical and postnatal patients.

7. Financial: The budget for the year was \$26,762.93. The association is supported by an appropriation from the city, membership dues, donations, fees and payments from the Metropolitan Life Insurance Company.

8. General statement: The association is becoming more and more identified with the forces of prevention, each new contact seems to offer a way that means prevention of suffering, rather than going through the old process of curing. In this connection the prenatal work, the well baby clinics, the preparation for better work in the classes for the staff and the child welfare work deserves notice.

### PENNSYLVANIA

#### VISITING NURSE ASSOCIATION, BABY HEALTH STATION

##### Bethlehem

1. Organized 1915.

2. Aim: To prevent infant mortality and to give professional care to the sick in their homes.

3. Board: The governing board consists of 5 men and 4 women.

4. Territory: The population in the territory covered is approximately 50,000.

5. Staff: Superintendent, who is also superintendent of the nursing service. Doctors: 2 part time. Nurses: 5 staff, 2 of whom are special.

6. Type of work: Home visiting, clinics, classes, hospital and a health center are maintained for infants; home visiting and clinics for pre-school children; home visiting for prenatal, obstetrical and postnatal patients. "Little Mother's Leagues" and "Midwives Conferences" are held.

7. Financial: The budget for the year was \$9,000. The stations are supported by the community chest and an appropriation from the city. No fee is charged for Baby Health Station work, fees for the Visiting Nurse Association are regulated for each case.

8. General statement: Visits to stations by patients, 2607; Quarts of milk dispensed from stations, 39,420; Visits of nurses, 12,782; Babies under 2 years of age under supervision, 1,295; Number of cases taken to hospital or dispensary, 18.

# CHILD HEALTH CENTER

## Chester

1. Organized: Station No. 1 was organized November 1, 1918. Station No. 2 was organized June 29, 1920.
2. Aim: The prevention of infant mortality through education of mothers with regard to proper feeding and general health.
3. Board: A board of 21 women governs the center.
4. Territory: The center serves an urban territory with a population of 35,000.
5. Staff: Doctors: 1 director, 4 volunteers. Dentists: 2 volunteers. Nurses: 2. Volunteer workers: 4.
6. Type of work: The work of the center is preventive and educational and deals with infants and pre-school children. Special attention is given to dental work and diseases of the throat and nose.
7. Financial: The budget for the year was \$4,000. The center is supported by an appropriation from the city and by special contributions.
8. General statement: Statistics for nine months show that 1,754 patients were enrolled at the clinic; 489 patients visited the clinic and 1,572 home visits were made.

# DU BOIS CHAPTER AMERICAN RED CROSS

## Du Bois

1. Organized: The chapter was organized April 12, 1917 in the interest of the American Red Cross; the Public Health Nursing Service was organized February 11, 1920; the Baby Clinic (Well) Center was organized January 23, 1922.
3. Board: The governing board consists of 8 men and 4 women.
4. Territory: The chapter serves an urban territory with a population of 15,000 and a rural territory with a population of 5,000.
5. Staff: Doctors: 3. Nurses: 2. Lay helpers: 2.
6. Type of work: The work includes bedside nursing, school work, social service and child welfare work.
7. Financial: The total budget for the year was \$6,000. The chapter is supported by membership dues and donations.
8. General statement: At the present time there is an enrollment of 208 infants and 75 children of pre-school age enrolled in the Well Baby Clinic, with an average attendance of 20.

# ERIE COUNTY ANTI-TUBERCULOSIS SOCIETY

## Erie

1. Organized July 1920.
2. Aim: The society has a three-fold purpose: educational, preventive and curative.
3. Board: The governing board consists of 6 men.
4. Territory: The work of the society covers an urban territory with a population of 102,093, and a rural territory with a population of 51,000.
5. Staff: Executive secretary. Educational secretary. Medical supervisor. Doctors: 12 part time (free service), 35 cooperating. Clerical assistant: 1.
6. Type of work: Home visiting, clinics and health centers are maintained for adults, as well as for infants and children. In addition to the regular work orthopedic clinics are held. The society acts as an educational agency for the entire county, cooperating with State Clinic, Health Centers and Modern Health Crusade.
7. Financial: The total budget for the year was \$6,500. The society is supported by the Christmas Seal sale.
8. General statement: The most constructive work done during the year was the establishment of 4 health centers.

## COMMUNITY HEALTH CENTER

## Philadelphia

1. Organized March, 1921.
2. Aim: The scope of the Center falls into the following divisions: Diagnostic Clinic, Preventive Medicine, and Health Education.
3. Board: The governing board consists of 7 men and 13 women.
4. Territory: The work of the center covers an urban territory.
5. Staff: Executive secretary. Supervisor of medical service. Psychiatrist. Psychomotrist. Doctors: 4 part time. Dentists: 2 part time, 1 supervisor. Social workers: 10 (free service). Nutrition service: 1 (free service). Supervisor of laboratory. Clerical assistants: 4. Volunteer workers: 20.
6. Type of work: Diagnostic clinics, referring to hospitals for treatments. Clinics and classes for preventive and educational work; clinics for dental and mental disease work; a nutrition class and a laboratory are also conducted. The work deals with both adults and children.
7. Financial: The total budget for the year was \$15,000. The center is supported by the community chest, special contributions and the Federation of Jewish Charities.
8. General statement: During the year 3,229 diagnostic examinations were made by the staff.

## PHILADELPHIA ASSOCIATION OF DAY NURSERIES

## Philadelphia

1. Organized 1908.
2. Aim: The establishment and maintenance of the highest type of child care in every nursery, with constructive service to the family of which the child is a member.
3. Board: The executive committee consists of 10 women and the board of directors consists of 21 women.
4. Territory: The association serves both urban and rural territory.
5. Staff: Executive secretary. A nutritional expert has been donated by the Interstate Dairy Council.
6. Type of work: The work includes home visiting and clinics. Educational work is conducted among the mothers as to the proper care of the babies and children. A roof garden and nurseries are maintained for infants and pre-school children.
7. Financial: The budget for the year was approximately \$3,500. The association is supported by membership dues and the Welfare Federation.
8. General statement: At least 10 nurseries are now giving a complete physical examination to every child on admission, with routine reexamination at stated periods. Recommendations are followed up by the nursery visitor using available hospitals, clinics, or health centers. The Department of Preventive Care of the Children's Hospital of Philadelphia is used for instruction in posture, nutrition and dental hygiene. Whenever the permission of the mothers has been obtained this department is used for the Schick test. The cooperation of the Interstate Dairy Council resulted in the services of a trained worker who gave a series of demonstrations to mothers on the "Use and Value of Milk." The council also donated milk in various nurseries to underweight children in the nutrition class. A much wider interest has been evinced in the recreation of the children, with emphasis on outdoor play and effort to provide a higher type of supervision. The influence of the State Department of Public Welfare in medical standards and the interest of the Welfare Federation of Philadelphia in a standardized program are contributing greatly to the work of the association. Both organizations have publicly endorsed our aims and methods.

# PRESTON RETREAT SOCIAL SERVICE

## Philadelphia

1. Organized April, 1915.
2. Aim: To help mothers take better care of themselves, their children and homes.
3. Board: The governing board consists of 21 women.
4. Territory: The work of the organization covers an urban territory.
5. Staff: Supervisor of nursing service, 1 nurse. Doctors: 2. Social service: 1 worker.
6. Type of work: Home visiting and clinics conducted for maternity and prenatal cases. Home visiting for postnatal cases.
7. Financial: The organization is supported by special contributions and membership dues.
8. General statement: During the year 447 prenatal patients were enrolled at the clinic; 317 patients were given hospital care. The infant mortality rate was 20 per cent.

# THE BABIES' HOSPITAL OF PHILADELPHIA

## Philadelphia

1. Organized June, 1911.
2. Aim: To prevent disease and keep the babies well.
3. Board: The governing board consists of 17 men and 4 women.
4. Territory: The hospital serves an urban territory with a population of 1,823,158.
5. Staff: Superintendent, who is also director of nursing service. Doctors: 2. Nurses: 3 to 10 (special). Dentists: 1 director, 3 part time (free service), 1 mouth hygienist. Social service: 1 director, who is a nurse, 1 full time worker, 7 visiting nurses who do social work. Nutrition service: 1 part time, 1 supervisor. Clerical assistants: 3. Volunteer workers: 8 to 10.
6. Type of work: Home visiting, clinics, hospital and health centers are maintained for postnatal cases, infants and pre-school children. Home visits are made to prenatal cases. A social service and follow-up system is maintained. Health centers provide rest and instruction for mothers and health building for the babies.
7. Financial: The total budget for the year was \$88,503.78. The hospital is supported by the Welfare Federation of Philadelphia. No fees are charged, but contributions are encouraged.
8. General statement: During the year 9,535 patients visited the clinic, 28,118 home visits were paid by the staff, 4,171 patients were given home care and 172 patients were given hospital care.

# THE CHILD FEDERATION

## Philadelphia

1. Organized September 30, 1913.
2. Aim: Research, demonstration and education in the field of health promotion and health education, with special reference to the health of babies and children.
3. Board: The governing board consists of 11 men.
4. Territory: The federation serves an urban territory with a population of 1,823,158.
5. Staff: Managing director. Dentist: 1 hygienist. Nutrition service: 1. Clerical assistants: 2.
6. Type of work: Health promotion of mothers and children. "Little Mothers' League," demonstration classes, clinics and educational work are maintained.

7. Financial: The total budget for the year was \$18,900. The federation is supported by the Welfare Federation.

8. General statement: To promote health concretely but broadly through the community is better for the individual and the state, more humane and more statesmanlike, also more economical and effective, than to depend entirely upon curative processes.

## THE CHILDREN'S HOSPITAL OF PHILADELPHIA

### Philadelphia

1. Organized 1855.

2. Aim: To care for sick babies and children in its wards and dispensaries. To keep well children well through its department for the prevention of disease. To afford facilities for the education of doctors and nurses and through them of the public.

3. Board: The board of managers consists of 18 men.

4. Territory: The hospital serves an urban territory.

5. Staff: Director, superintendent, clinical assistants to attending physicians, head worker, health teacher, field workers, clerical assistants and volunteer workers.

6. Type of work: Physicians, medical students and nurses receive instruction in child hygiene and the prevention of disease. Home visiting, clinics, hospital and health centers are maintained for prenatal patients, infants and children. Mothers' conferences are held twice a week. Nutrition and posture classes are held for pre-school children. Health clubs have been organized for girls and boys.

7. Financial: The budget for the year was \$117,211.83. The hospital is supported by legacies, gifts, membership dues and fees.

8. General statement: During the year 1,664 patients were admitted to the hospital, and 27,846 patients were treated in the dispensaries. A long stride has been taken toward making the hospital a real community health center for the child through the opportunities which have been afforded the department for the prevention of disease, for widening the scope of its work and for putting into operation the plans of its director.

## THE STARR CENTER ASSOCIATION

### Philadelphia

1. Organized 1897.

2. Aim: To promote by practical methods the educational, physical and social improvement and to open the way for a higher and better standard of living of those residing in poor neighborhoods, especially in the vicinity of the Starr Garden at Seventh and Lombard streets, in the city of Philadelphia, commonwealth of Pennsylvania.

3. Board: The governing board consists of 6 men and 6 women.

4. Territory: The work of the association covers an urban territory with a population of 50,000.

5. Staff: Secretary. Doctors: 3 part time, 1 supervisor. Nurses: 4 staff, 1 supervisor. Dentists: 1 supervisor, 1 part time. Nutrition service: 1 supervisor, 1 part time. Clerical assistant: 1.

6. Type of work: Home visiting, clinics, classes and health centers are maintained for adults as well as for infants and children. Educational and preventive work is conducted. "Little Mothers' Leagues" are a part of the work.

7. Financial: The budget for the year was \$12,600. The association is supported by the community chest. A nominal fee is charged for dressings.

8. General statement: During the year 11,326 patients visited the clinic; 13,511 home visits were made by the staff; 112 patients were given home care; 205 patients were given hospital care.

# THE PUBLIC HEALTH NURSING ASSOCIATION

## Pittsburgh

1. Organized July, 1919. Incorporated October, 1919.
2. Aim: To give skilled nursing care to the sick, to render emergency care and to teach the prevention of disease and the promotion of health.
3. Board: The governing board consists of 8 men and 13 women.
4. Territory: The association serves both urban and rural territory.
5. Staff: Director, assistant director, volunteer physicians, supervisor of infant welfare department, volunteer pediatricians, supervisor of county nursing service, staff nurses, clerical assistants.
6. Type of work: Infant welfare, prenatal and postnatal work is done and maternity clinics are held.
8. General statement: The nurses make periodic visits to expectant mothers to advise and instruct in the hygiene of pregnancy. They take persons to special hospitals and clinics for correction of defects and for periodic examinations to check the progress of disease. The nurses bring to the attention of the doctors cases needing medical care. The nurse teaches ventilation, cleanliness and good health habits in the homes of the people and when necessary brings to the attention of the authorities all conditions of insanitation. Six infant welfare stations have been established. Conferences are held weekly in each station for examination of well children under six years of age, with continued supervision by the nurse in the homes. The conferences are in charge of physicians, who are children's specialists. A teaching center has been established to provide training and field experience to the students of the hospital training schools. It is through the public health nurse that health programs and the benefits of medical science can reach every individual man, woman and child.

# VISITING NURSE ASSOCIATION OF WILKES-BARRE

## Wilkes-Barre

1. Organized 1908.
2. Aim: To provide professional nursing service for sick in their homes; to teach laws of health, sanitation and hygiene to patient, family and community; to prevent the spread of disease; to work with all agencies for the health and betterment of the community; to bring cheer and comfort through our social service committee to the helpless and chronic invalid.
3. Board: The association is governed by an advisory board of 5 men, a board of directors consisting of 35 women, also a medical advisory board consisting of 15 members.
4. Territory: The work of the association covers the whole city, from the center to the most remote districts.
5. Staff: Superintendent, who is also supervisor of nursing service. Doctors: 3 (free service). Nurses: 6 staff, 3 pupil, 4 special (for 3 months of the year, to assist with child hygiene work). Clerical assistant: 1.
6. Type of work: Baby welfare and pre-school welfare departments have been established. Training for pupil nurses in public health service is an important part of the work; health instruction is also given to Camp Fire Girls, Boy Scouts and other groups. Service is rendered to adults as well as to infants and children.
7. Financial: The total budget for the year was \$19,421.92. The association is supported by volunteer contributions, membership dues and an appropriation from the city. Fees are regulated for each case.
8. General statement: Report for fiscal year September, 1921, to September, 1922:

Number of infants under care .....	2,009
Number of children between 2 and 6 .....	95
Number of prenatal cases .....	167
Number of postnatal cases .....	489
Percentage of breast-fed babies .....	75%

## VISITING NURSE ASSOCIATION

## York

1. Organized January, 1909.
2. Aim: To provide a community public health nursing service.
3. Board: The association is governed by an advisory board of 12 men and a board of managers of 32 women.
4. Territory: The work covers both urban and rural territory with a total population of 55,000.
5. Staff: Doctors: 10 part time. Nurses: 1 director, 14 staff. Clerical assistant: 1. Volunteer workers: 10. Dental service is in charge of the board of education.
6. Type of work: Home visiting, nursing, prenatal, maternity and child welfare and industrial aid form the work of the association.
7. Financial: The total budget for the year was \$30,000. The association is supported by a "Red Letter Day Campaign" and appropriations from the city, county and board of education.
8. General statement: The year just closed is probably the best year on record in the history of the association. The principal improvement is in the mortality of infants. The death rate has been:

	Births	Deaths (un- der 1 year)
1919 .....	935	100
1920.....	1,188	82
1921.....	1,150	55

Out of 1,400 mothers who gave birth to live babies in the radius covered by the Visiting Nurse Association during 1921, 570 came to the attention of the association either before birth or at time of birth, about 41 per cent of all the cases. There is also a decrease in communicable disease. The statistical report for the year is as follows:

Cases carried into 1922.....	2,309
Visits made by staff.....	34,471
Cases given hospital treatment.....	65

## PHILIPPINE ISLANDS

## PHILIPPINES CHAPTER OF THE AMERICAN RED CROSS

## Manila

1. Organized December 5, 1917.
2. Aim: To alleviate suffering in time of war or disaster and to prevent suffering in time of peace by promoting and engaging in an active public health program. The services in operation are home service, which is social service to ex-service men and their families; Junior Red Cross Service which is promoting the organization of children for service; health and nursing service and disaster relief.
3. Board: The governing board consists of 9 men and 2 women.
4. Territory: The work of the chapter covers an urban territory with a population of 300,000 and a rural territory with a population of 7,700,000.
5. Staff: Executive secretary. Doctors: 1 full time, 4 part time. Nurses: 1 supervisor, 36 staff. The secretary of the Junior Red Cross is also supervisor of the dental service. Dentists: 17 full time (1 free service). Clerical assistants: 3. In addition to the executive committee there are active committees on the Junior

Red Cross, health and nursing and disaster relief. In each province in the Islands there are active branch committees which are responsible for the local programs.

6. Type of work: Home visiting for prenatal, maternal, obstetrical and post-natal patients, infants and children. Clinics are maintained for prenatal patients as well as for infants and children. One hundred children were sent to the mountains last spring, where a camp was established by the Junior Red Cross.

7. Financial: The total budget for the year was 129,940 pesos; for health and nursing 109,780 pesos and for the Junior Red Cross 20,160 pesos. The chapter is supported by annual membership dues and contributions. Fees are regulated for each patient.

8. General statement: The health and nursing program of the Philippines chapter was reorganized in 1922. Previous to April there were 11 nurses employed for child welfare work, 8 in Manila and the others in Pangasinan, Carmarines Sur and Romblon. Sixteen "aids" were given two months' training last fall and were sent out to do health work. One Puericulture established in Manila. Since May the first 13 new centers have been opened, 1 being a substation in Santa Cruz district. Fourteen baby welfare nurses have begun work and 13 nurses put on duty for school work.

## PUBLIC WELFARE COMMISSION

### Manila

1. Organized May 1, 1921.

2. Aim: To undertake all work related to maternity and child welfare; to improve the general welfare of the community and to give technical and financial aid to local (town or province) child welfare organizations;

4. Territory: The commission serves the entire insular territory with a total population of 10,350,730.

5. Staff: Commissioner. Doctors: 1 supervisor, 18 full time. Nurses: 14 supervisors, 108 staff. Dentists: 1 director, 2 part time. Social service: 2 directors, 5 full time. Institutional workers: 10.

6. Type of work: The activities are:

1. To investigate, promote, coordinate and inspect and regulate all work related to maternity, child hygiene and welfare in the Philippine Islands.

2. To study, coordinate and regulate the efforts of all government agencies and influences in public welfare or social service work and of such private agencies as are receiving government support.

3. To investigate social conditions in the Philippine Islands.

4. To provide orphaned or needy children with means for their care, as well as to provide necessary care to defective and delinquent children.

5. To give technical and financial assistance to public welfare organizations, particularly those whose aims are directed to child welfare work which are known as puericulture center organizations.

7. Financial: The budget for the year was \$211,361. The commission is supported by an appropriation from the legislature and by special contributions.

8. General statement: The commission has at present 2 schools of midwives and it is planned to establish more schools of this kind in provincial capitals in order to increase the number of licensed midwives who can substitute ignorant ones. The school of midwives offer courses of 9 months' duration, after the completion of which the graduates are allowed to take the board's examination to enable them to become licensed midwives.



## RHODE ISLAND

### PROVIDENCE DEPARTMENT OF HEALTH, DIVISION OF CHILD HYGIENE

#### Providence

1. Organized October, 1912.
2. Aim: Prevention of infant mortality and the protection of child life.
3. Board: The Division of Child Hygiene is under the charge of the Health Department, which is maintained by the City Council.
4. Territory: The division serves an urban territory with a population of 240,304.
5. Staff: Superintendent. Doctors: 16 part time. Nurses: 2 special, 15 staff. Dentist: 1 part time. Clerical assistant: 1. Volunteer worker: 1.
6. Type of work: The infant welfare work at present consists of supervision of all infants delivered by midwives in the city, supervision of all infants in the licensed boarding homes of the city, supervision of such infants of unmarried mothers as are not under the supervision of private organizations.
7. Financial: The budget for the year was \$31,890. The division is supported by an appropriation from the city.
8. General statement: The infant supervision is carried on by the infant welfare nurses who visit the homes as frequently as is necessary, and who encourage the mothers to take their infants to the stations periodically when they are well and to call a physician or take the baby to a dispensary or hospital clinic when sick. A minimum of nine visits is made to each baby during its first year. During the year 1,417 infants were delivered by the registered midwives. Thirty of these infants died before reaching the age of one month. There was a total attendance of 5,140 babies at the child welfare committee centers; 14,965 children were seen by the school physicians and 8,947 of these children were found to have some disease or one or more physical defects, 82 per cent of the defects or diseases capable of cure or correction were cured or corrected during the year.

### PROVIDENCE DISTRICT NURSING ASSOCIATION

#### Providence

1. Organized June, 1900.
2. Aim: To provide trained nurses to care for the sick in their homes and to instruct members of the household in the simple rules of hygiene.
3. Board: The governing board consists of 14 men and 16 women.
4. Territory: The work of the association covers an urban territory.
5. Staff: Superintendent, associate superintendent. Nurses: 2 staff supervisors, 19 graduate, 9 pupil, 10 tuberculosis, 12 child welfare, 1 venereal disease.
6. Type of work: Home visiting of adults, infants and children.
7. Financial: The budget for the year was \$87,691.01. The association is supported by an appropriation from the city, special contributions, annual donations and "tag-day." Fees are regulated for each patient.
8. General statement: During the past year the volume of both the children's and prenatal work increased. This has been met by the addition of 2 nurses to the staff. The increase in the number of children cared for and supervised was 389, in prenatal cases 452. Three new conferences were opened during the year, making a total of 9. The conferences are financed by the Rhode Island Congress of Mothers, North End Dispensary and Branch Avenue Neighborhood Center. The city health department employs 5 child welfare nurses who supervise midwives and care for all babies delivered by midwives and inspect and supervise all infant boarding houses. The outstanding needs for better child welfare work in Providence are more prenatal clinics and a free medical obstetrical service.

## SOUTH CAROLINA

### EMMA MOSS BOOTH MEMORIAL HOSPITAL AND TRAINING SCHOOL FOR NURSES

Greenville

1. Organized January 1, 1921.
2. Aim: Care of normal and sick children of any age.
3. Board: The advisory board consists of 11 men.
4. Territory: The work of the organization covers North Carolina and South Carolina, Georgia, and Florida.
5. Staff: Superintendent. Doctors: 1 director, 19 part time (free service). Nurses: 4 supervisors. Dentists: 1 director, 2 part time (free service). Social service: 1 director, 8 full time. Nutrition service: 1 director, 2 full time, 8 full time (free service). Clerical assistants: 2.
6. Type of work: In addition to providing medical supervision and care for children the organization provides clinics and hospital care throughout pregnancy to every expectant mother who can be reached and who is not already receiving medical care.
7. Financial: The total budget for the year was \$42,680. The organization is supported by the public and by earnings, special contributions and the community chest.
8. General statement: During the year 3,624 patients visited the clinics; 612 patients were given hospital care.

## SOUTH DAKOTA

### PUBLIC HEALTH CENTER OF BROWN COUNTY

Aberdeen

1. Organized November 1, 1922.
2. Aim: To promote a closer co-operation of the city and county health organizations under one director, who will devote his entire time to preventive medicine, better sanitation and a more healthful community.
3. Board: The governing board consists of 3 men.
4. Territory: The work covers an urban territory with a population of 15,000, and a rural territory with a population of 15,000.
5. Staff: County health officer. Doctors: 1 director, 1 full time, 1 part time. Nurses: 3 staff. Clerical assistant: 1. Volunteer service: 1. Classes in hygiene sometimes assist on special occasions. Local hospitals also furnish undergraduates to assist nurses and to see something of the public health program.
6. Type of work: In addition to the regular work which deals with curbing the spread of diseases, hospital care is given to obstetrical and postnatal patients, communicable and venereal disease work being included. A mobile unit is operated for dental work. The health center is under the supervision of the county health officer.
7. Financial: The budget for the year was \$15,500. The center is supported by the city, county and Red Cross. No fees are charged.
8. General statement: The plants have been completed for a specially trained public health nurse who will be employed to make a complete tubercular survey of the county. When this survey is completed a portion of the county will be turned over to her for general public health work. At the clinics a total of 647 babies were examined, 4,155 calls were made by the nurses.

**SOUTH DAKOTA STATE BOARD OF HEALTH****Waubay**

1. Organized 1913.
2. Aim: The promotion of public health.
3. Board: The governing board consists of 5 men.
4. Territory: The organization serves the entire state with a total population of 650,000.
5. Staff: Superintendent, director. Clerical assistants: 10. There are 24 public health nurses in the state in charge of different organizations.
6. Type of work: School and community health campaign conducted for communicable disease, tuberculosis, and venereal disease work.
7. Financial: The total budget for the year was \$45,000. The organization is supported by legislative appropriation.
8. General statement: The infant mortality rate for 1921 in the entire state was 74.6 per 1,000 births.

**TEXAS****BUREAU OF CHILD HYGIENE OF THE STATE BOARD OF HEALTH****Austin**

1. Organized September, 1919.
2. Aim: Infant, maternity and child hygiene and welfare of Texas.
3. Board: The bureau is one of the activities of the State Board of Health.
4. Territory: The work of the bureau covers the entire state.
5. Staff: Director. Nurses: 2 supervisors, 7 staff. Clerical assistants: 4.
6. Type of work: Health centers are maintained for prenatal patients, infants and pre-school children. Both home visiting and classes for preventive and educational work are conducted. The work deals with both children and adults.
7. Financial: The budget for the year was \$17,500, supplemented in June by federal aid through the Sheppard-Towner act.
8. General statement: The pamphlets published by the bureau are: Care of the Baby (Spanish and English), Prenatal Care, Care of the Teeth, Child Health Centers, Health Hints and Jolly Jingles, What a Child Should Know, Health Rules, Prepare against Disease. Also, we have a series of prenatal letters and have at the present time a file of expectant mothers to whom we are sending monthly prenatal letters. We buy posters which are sent out to the public health nurse and rural schools.

**HOME ECONOMICS DIVISION, BUREAU OF EXTENSION, UNIVERSITY OF TEXAS****Austin**

1. Organized 1914.
3. Board: The division is one of the activities of the university.
4. Territory: The scope of the work is state-wide.
5. Staff: Director. Assistants: 3.
6. Type of work: Nutrition classes and clinics are held for the school child. Classes are offered for mothers in which they are given lessons in food and nutrition. Classes are offered to school teachers in which they are given training in health and nutrition in order that they may incorporate the teaching of health and nutrition in their regular school program.
7. Financial: The division is supported by an appropriation from the state. No fee is charged for services. The university pays the traveling expenses of a worker to and from the town where work is to be done, but asks the town to pay local expense of the worker.

8. General statement: The work deals with the pre-school child, 6 months to 7 years of age. Conferences are held annually in towns where desired and where there is a public health nurse to do follow-up work. These conferences are directed by one of our workers, who also confers with the mothers about the nutrition of their children. The record of each child's examination is made in triplicate, one is given to the mother, another is given to the local public health nurse and the third is kept by our department. There is space on each card for four years' examinations, thus a mother who brings her child and record book to the conference year by year, will know the growth and progress the child is making. If, at the end of four years, the child has had all possible defects corrected and is in general good health, he is awarded a health certificate issued by our department. These conferences are being held regularly each year in 20 Texas towns.

## VERMONT

### CAVENDISH HOUSE, INC.

#### Proctor

2. Aim: To conduct and maintain a school of cooking and sewing and other domestic sciences for the maintenance of a social center for the women of the town of Proctor, Vermont, for purposes incidental thereto.

3. Board: The governing board is composed of 1 man and 2 women.

4. Territory: The work of the organization covers an urban territory with a population of 2,800.

5. Staff: The staff consists of 6 women, 1 of whom is physical education director in public schools; 1 school nurse; 1 nurse for classes and miscellaneous work; 3 domestic science teachers.

6. Type of work: Classes are held in home nursing, educational work and home economics. Classes and social evenings for working girls and foreign women are a part of the work.

7. Financial: The organization is supported by private funds.

8. General statement: Cavendish House is open for baths 2 days a week throughout the year, also for shampoos. The school nurse holds office hours for dressings, treatments, etc., 2 hours a day. During the year 697 visits were made by the staff.

## VIRGINIA

### THE NORFOLK CITY UNION OF THE KING'S DAUGHTERS, VISITING NURSE SERVICE, CLINIC FOR CHILDREN

#### Norfolk

1. Organized 1896.

2. Aim: To give to the poor and those of moderate means the best home nursing possible under existing circumstances, and to give to the children of the poor, through clinics, the medical attention of specialists.

3. Board: The governing board consists of 30 women.

4. Territory: The organization serves an urban territory with a population of approximately 180,000.

5. Staff: Superintendent, who is a nurse. Doctors: 1 director, 11 part time (free service). Nurses: 3 supervisors, 11 staff. Dentist: 1. Nutrition service: 1. Clerical assistants: 2. Volunteer service: 10.

6. Type of work: Home visiting is provided for maternal, prenatal, obstetrical and postnatal patients, as well as for infants and children. Clinics are also conducted.

7. Financial: The total budget for the year was \$31,837.44. The organization is supported by membership dues, appropriations from city and state, special contributions and fees.

8. General statement: The different departments of the child welfare clinic are feeding, general, eye, ear, nose and throat, dental, orthopedic and laboratory. In connection with the clinic is an operating room and children's ward where minor operations, such as tonsils and adenoids, are performed. Follow-up visits in the home is a most important part of the work, these visits are made by all nurses on the staff.

## CHILD WELFARE BUREAU

### Richmond

1. Organized 1918.

2. Aim: Reduction of sickness and death among children, infants and mothers, and the promotion of health.

3. Board: The governing board consists of 9 men and 1 woman.

4. Territory: The bureau serves an urban and rural territory with a combined population of 2,754,000.

5. Staff: Director. Doctors: 1 full time, 10 part time. Nurses: 1 director, 4 supervisors, 34 staff. Dentists: 1 director, 9 full time. Clerical assistants: 5.

6. Type of work: Home visiting, clinics, classes, hospital and research work are conducted. Educational work in home nursing and midwife classes is a part of the work. Health centers and a mobile unit are maintained.

7. Financial: The budget for the year was \$63,594. The bureau is supported by the state. There is no fee except for the dental clinics.

8. General statement: The affiliated agencies are the American Red Cross and the Public Health Association.

## WASHINGTON

### THE SALVATION ARMY RESCUE HOME AND MATERNITY HOSPITAL

#### Spokane

1. Organized 1896.

2. Aim: To shelter and care for unfortunate women and their children.

3. Board: The organization is governed by the Salvation Army.

4. Territory: The organization serves the state and surrounding territory.

5. Staff: Commandant. Doctors: 3 (free service), 1 director. Nurses: 1 director, 2 supervisors.

6. Type of work: Hospital accommodation is furnished, domestic science taught, erring daughters restored to their homes and mothers, or situations found for them.

7. Financial: The total budget for the year was \$25,654.17. The organization is supported by contributions.

8. General statement: The girls and their children remain in the hospital at least three months and as much longer as is necessary. They are taught to work, special instruction being given in cooking, plain and fancy sewing and general housework. The officers keep in touch with the girls after leaving, and they can always count on a welcome at these homes when out of employment or ill. Twenty-eight of these hospitals are operated in the United States.

## WISCONSIN

### BELOIT VISITING NURSE ASSOCIATION

#### Beloit

1. Organized 1912.
2. Aim: To provide nursing care for sick patients in their homes; to reduce infant mortality through work of well baby clinics and prenatal clinic; to correct remedial defects in pre-school age children through eye, ear, nose and throat clinic; to reduce tuberculosis by arranging a sanatorium care for cases and instruction of patients who remain at home.
3. Board: The governing board consists of 7 women.
4. Territory: The association serves an urban territory with a population of 22,000.
5. Staff: Nurses: 1 supervisor, 1 assistant.
6. Type of work: The work includes bedside nursing; well baby and prenatal clinics; eye, ear, nose and throat clinic.
7. Financial: The budget for the year was approximately \$5,000. The association is supported by membership dues, fees, donations and the proceeds from sale of tuberculosis seals.

### HEALTH DEPARTMENT, DIVISION OF CHILD WELFARE

#### Milwaukee

1. Organized June 17, 1912.
2. Aim: The child welfare work shall include a study of all conditions which affect infant and child life in Milwaukee, both from a sociological and public health standpoint, and also an investigation of similar work in other cities and countries and by local municipal and non-municipal departments and organizations, an effort shall be made by this department to better such conditions in the city of Milwaukee.
3. Board: The division is governed by the health department.
4. Territory: The division serves an urban territory with a population of 457,147.
5. Staff: Commissioner of health. Doctors: 1 full time, 3 part time, 1 director. Nurses: 1 superintendent, 3 supervisors, 60 staff. Dentists: 3. Clerical assistants: 5.
6. Type of work: Home visiting is maintained for infants, children and adults. Fourteen clinics and three health centers are conducted. Special attention is given to dental, cardiac, tubercular and venereal disease cases.
7. Financial: The division is supported by an appropriation from the city.
8. General statement: While the chief medical director of each division is specialized in his individual line the nursing service is generalized, one nurse being responsible for all activities conducted in a given district. The department operates 3 substations or health centers where the various clinics are conducted. Aside from these, there are 11 child welfare clinics held in public and parochial schools, 1 in a social settlement, and 1 in the public library. During the year 2,757 patients were enrolled at the clinic; 47,952 home visits were made by the staff. The infant mortality rate was 75 per 1,000 births.

**MILWAUKEE CHILDREN'S HOSPITAL****Milwaukee**

1. Organized 1894.
2. Aim: The hospital was organized to care for indigent children under 12 years of age.
3. Board: The board of directors is composed of 19 women.
5. Staff: The staff is comprised of 40 physicians and surgeons who give their services gratuitously. The laboratory is directed by a physician and assisted by 2 technicians. The out-patient department is supervised by a registered nurse. The social service department has 3 trained workers, and the department of registration has in its employ a registrar and 2 assistants. The school for nurses has enrolled 51 student nurses.
6. Type of work: The character of the work done by the hospital necessitates many allied departments. In addition to the regular work a social service department is maintained; the work of the occupational therapy department, installed and supported by the Junior League of Milwaukee, has been of incalculable benefit to the children of the hospital. The out-patient department continues to fulfill its mission to the community and has done excellent work during the year; most of the patients admitted to the hospital are from that department.
7. Financial: The hospital is a private hospital and is supported by subscriptions and an endowment.
8. General statement: All the hospital babies have been made social service and each out-patient department baby has had at least one home visit from one of the pupil nurses. If on this visit, the nurse finds home conditions poor, the case is reported to the social service department.

**MILWAUKEE VISITING NURSE ASSOCIATION****Milwaukee**

1. Organized 1907.
2. Aim: To give nursing care, on the visit basis, in the homes.
3. Board: The governing board consists of 4 men and 8 women.
4. Territory: The association serves an urban territory with a population of 457,147.
5. Staff: Nurses: 1 director, 2 supervisors, 5 special industrial, 13 staff, 4 special. Clerical assistants: 2.
6. Type of work: General home visiting and bedside nursing are conducted.
7. Financial: The budget for the year was \$55,165. The association is supported by the community chest. Fees are regulated for each patient.
8. General statement: The report for 10 months ending August 1, 1922, gives the total number of patients as 4,916. The total number of visits made by the nurses was 31,804. Of the 1,349 patients who received postpartum care, 952 received prenatal advice in the homes; 364 patients received nursing service at the time of delivery.

## **MEMBERSHIP**

367



# CONTRIBUTORS

1922

## District of Columbia

American Red Cross.....Washington, D. C.  
Mr. Herbert Hoover.....Washington, D. C.

## Connecticut

Professor Irving Fisher.....New Haven  
Dr. Arnold Gesell.....New Haven  
Dr. James Greenway.....New Haven  
Mr. Philip S. Platt.....New Haven

## Illinois

Mrs. Herman B. Butler.....Winnetka  
Mrs. J. N. Eisendrath.....Chicago  
Mr. Wirt W. Hallam.....Chicago  
Mrs. James L. Houghteling.....Winnetka  
Mrs. James Simpson.....Chicago

## Maryland

Mrs. George Hamilton Cook.....Baltimore  
Mrs. James E. Hooper.....Baltimore

## Massachusetts

Dr. Bessie Talbot Strongman.....Pittsfield

## Michigan

Mrs. J. B. Ford.....Detroit

## Minnesota

Mr. James F. Bell.....Minneapolis

## Missouri

Mrs. B. F. Bush.....St. Louis  
Mrs. William Stribling.....St. Louis  
Dr. Borden S. Veeder.....St. Louis

## New Jersey

Mr. H. C. Munger.....Plainfield

## New York

Dr. H. J. Boldt.....New York City  
Carnegie Corporation.....New York City  
Mr. Edward K. Harkness.....New York City  
Laurs Spelman Rockefeller Memorial,  
New York City  
National Organization for Public Health Nursing  
New York City  
New York Commonwealth Fund.....New York City  
Mrs. Willard Straight.....Old Westbury, L. I.  
Mrs. E. H. Van Ingen.....New York City  
Mr. Stephen Williams.....New York City

## Ohio

Cleveland Welfare Federation.....Cleveland

## Oregon

Cooperative Infant Welfare Society.....Portland

## Pennsylvania

Mrs. Charles F. Jenkins.....Germantown  
Mrs. Sol Selig.....Philadelphia

## Rhode Island

Dr. Ellen A. Stone.....Providence

## Virginia

Mrs. W. G. Swartz.....Norfolk

## Washington

University of Washington.....Seattle  
Washington Anti-Tuberculosis Association.....Seattle

# AMERICAN CHILD HYGIENE ASSOCIATION

Membership for Fiscal Year Ending September 30, 1922

## HONORARY

Ballantyne, Dr. J. W.	Edinburgh, Scotland
Bertilhon, Dr. Jacques	Paris, France
Broadbent, Hon. Benjamin	Huddersfield, England
Campbell, Dr. Janet	London, England
Guinon, Dr. Louis	Paris, France
Hoover, Mr. Herbert	Washington, D. C.
King, Dr. Truby	Dunedin, New Zealand
Lane-Clayton, Dr. Janet E.	London, England
Mackenzie, Sir. W. Leslie	Edinburgh, Scotland
Newsholme, Sir Arthur	London, England
Pinard, Prof. A.	Paris, France
Sand, Dr. Rene	Brussels, Belgium
Weill-Halle, Dr. B.	Paris, France

## LIFE MEMBERS

Brown, Mrs. W. Harry, Pittsburgh  
 Clemson, Mrs. Daniel M., Pittsburgh  
 Davidson, Mr. Walter, Milwaukee  
 "Friend", Milwaukee  
 "Friend", Milwaukee  
 Gammell, Mr. William, Providence  
 Gitchell, Miss Katherine, Akron  
 \*Hanna, Mr. H. M., Cleveland  
 Herron, Mr. John W., Pittsburgh  
 Holt, Dr. L. Emmett, New York City  
 Horlick, Mr. J. A., Racine  
 Kieckhofer, Mr. F. A. W., Providence  
 Knox, Mrs. J. H. Mason, Jr., Baltimore  
 Knox, J. H. Mason, 3d, Baltimore  
 Knox, Miss Katherine Bowdoin, Baltimore  
 Laughlin, Miss A. L., Philadelphia  
 Mellon, Mr. A. W., Pittsburgh

Oliver, Mr. W. B., Baltimore  
 Pfister, Mr. Charles F., Milwaukee  
 Phipps, Senator Lawrence C., Denver  
 Putnam, Mrs. William Lowell, Boston  
 Rockefeller, Mrs. Percy, Greenwich  
 Russell, Mrs. Marshall, New York City  
 Schlotman, Mrs. Joseph P., Detroit  
 Stern, Mr. Walter, Milwaukee  
 Stotesbury, Mrs. Edward, Philadelphia  
 Volker, Mr. William, Kansas City  
 Wade, Mr. J. H. Cleveland  
 White, Mr. Richard J., Baltimore  
 Winton, Mr. and Mrs. C. J., Minneapolis  
 I. W.

\*Deceased.

## AFFILIATED MEMBERS

### UNITED STATES AND INSULAR POSSESSIONS

**Alabama**  
**BIRMINGHAM**  
 Social Science Works, Tennessee Coal, Iron &  
 Railroad Company, 1210 Brown-Marx Building

**California**  
**LONG BEACH**  
 Day Nursery, 805 Alamitos Avenue

**OAKLAND**  
 Baby Hospital Association, 51st and Dover  
 Streets  
 Public Health Center of Alameda County, 31st  
 and Grove Streets

**SAN FRANCISCO**  
 Baby Hygiene Committee, American Association  
 of University Women, Room 510, 333  
 Kearney Street  
 California Dairy Council, 216 Pine Street

**SANTA BARBARA**  
 Visiting Nurse Association, 133 East Haley Street

**Colorado**  
**COLORADO SPRINGS**  
 Colorado Springs Day Nursery, 822 South  
 Tejon Street

**DENVER**  
 Colorado Child Welfare Bureau, 1061 Clarkson  
 Street  
 Denver Tuberculosis Society, 409 Barth Building  
 Junior League of Denver, 935 Washington Street  
 Visiting Nurse Association, 535-536 Temple  
 Court

**Connecticut**  
**BRIDGEPORT**  
 Department of Health  
 Department of Public Charities

**CANAAN**  
 Connecticut Organization for Public Health  
 Nursing, Box 391

**EAST HAVEN**  
 Alumnae Association of the Connecticut Training  
 School for Nurses, New Haven Hospital,  
 23 Elm Street

**HARTFORD**  
 Bureau of Child Hygiene and Division of Public  
 Health, Nursing, State Department of  
 Health  
 Union for Home Work, 239 Market Street  
 Visiting Nurse Association and Babies' Hospital,  
 Inc. Health Stations, 243 Market Street

**MIDDLETOWN**

District Nurse Association, 51 Broad Street

**NEW HAVEN**

Bureau of Nursing, Department of Health

Child Welfare Department of the New Haven

Visiting Nurse Association, 35 Elm Street

Civic Protective Association, 452 Orange Street

Connecticut Children's Aid Society, New Haven

Branch, 207 Orange Street

Crippled Children's Aid Society, Inc., 30 Howe

Street

New Haven Health Center, 574-78 Grand

Avenue

New Haven Orphan Asylum, 610 Elm Street

West End Club, 371 Central Avenue

Yale University, Department of Education

**NORTH HAVEN**

New Haven Woman's Club

**WATERBURY**

Visiting Nurse Association, 37 Central Avenue

**Delaware****WILMINGTON**

Child Welfare Commission of Delaware, Ford Building

**District of Columbia****WASHINGTON**

Child Welfare Society, 2100 G. Street, N. W.

Providence Hospital

Providence Hospital Social Settlement, 408

Third Street, S. E.

**Georgia****ATLANTA**

Georgia State Association of Graduate Nurses,

Piedmont Sanatorium, Capitol Avenue and

Crumley Street

**AUGUSTA**

Children's Hospital Association, Harper Street,

Sacred Heart Benevolent Association, Corner

Ellis and 13th Streets

Woman's Society, St. Matthews Lutheran

Church

**SAVANNAH**

Home Service Section, American Red Cross

**Hawaii****HONOLULU**

Central Committee on Child Welfare, 2330

Beckwith Street

District Nursing Department, Palama Settle-

ment, P. O. Box 514, King and Liliha Streets

**WAILUKU, MAUI**

Alexander House Settlement

**Idaho****BOISE**

Department of Public Welfare

**Illinois****CICERO**

Cicero Welfare Center, 5208 West 25th Street

**CHICAGO**

Chicago Lying-in-Hospital and Dispensary, 426

East 51st Street

Chicago Woman's Club, 410 South Michigan

Avenue

Elizabeth McCormick Memorial Fund, 848

North Dearborn Street

Infant Welfare Society of Chicago, 104 South

Michigan Avenue

Mothers' Aid of the Chicago Lying-in Hospital and Dispensary

Providence Day Nursery, 3046 Grattan Avenue

Scanlon Health Club, 149 West 117th Street

Stewart Ridge Mother's Club, 38 West 109th Street

**FREEPORT**

Amity Society, Child Welfare Station, 6 Galena

Street

**GALESBURG**

Child Welfare Committee, Knox County

Chapter, American Red Cross

**LA SALLE**

La Salle Infant Welfare Station

**SPRINGFIELD**

Bureau of Child Hygiene, City Health Depart-

ment

**Indiana****ELKHART**

Child Welfare Station, 112 Municipal Building

**EVANSVILLE**

Babies' Milk Fund Association, 903 First Street

**INDIANAPOLIS**

Children's Aid Association, 62-83 Baldwin Block

Division of Infant and Child Hygiene, Indiana

State Board of Health, 330 State House

Public Health Nursing Association

**SOUTH BEND**

Children's Dispensary and Hospital Association,

1031 West Division Street

**Iowa****DES MOINES**

Iowa Tuberculosis Association, 518 Century

Building

**IOWA CITY**

Child Welfare Research Station The State

University of Iowa

**KEOKUK**

Visiting Nurse Association

**Kansas****MANHATTAN**

Kansas State Agricultural College, Department

of Household Economics

**WICHITA**

Christian Service League of America, 1825 West

Maple Street

Public Health Nursing Ass'n, 4th Floor, City

Building

**Kentucky****LOUISVILLE**

Bureau of Child Hygiene, State Board of Health

Neighborhood House, 428 South First Street

Public Health Nursing Association, 215 East

Walnut Street

**Louisiana****NEW ORLEANS**

Child Welfare Association, 544 Audubon Build-

ing

Louisiana State Board of Health

**Maine****AUGUSTA**

Maine Public Health Association, 318 Water

Street

**PORTLAND**

Baby Hygiene and Child Welfare Association

Room 2 D, City Building

**Maryland****BALTIMORE**

The Babies Milk Fund Association, Pratt and Calvert Streets  
 Council Milk and Ice Fund, The Navarre  
 Florence Crittenton Mission, 837 Hollins Street  
 Health Department, 311 Courtland Street  
 Jewish Children's Bureau, 411 West Fayette Street

**Massachusetts****BOSTON**

Baby Hygiene Association, 561 Massachusetts Avenue  
 Boston Floating Hospital, 244 Washington Street  
 Committee on Prenatal and Obstetrical Care of the Women's Municipal League, 49 Beacon Street  
 Instructive District Nursing Association, 561 Massachusetts Avenue  
 Massachusetts Parent-Teacher Association, 248 Boylston Street  
 Massachusetts Society for Prevention of Cruelty to Children, 43 Mt. Vernon Street  
 Massachusetts State Department of Health  
 Sunnyside Nursery, 16 Hancock Street

**CAMBRIDGE**

Infant Welfare Committee, 51 Brattle Street

**EAST BOSTON**

Maverick Dispensary, Inc., 18 Chelsea Street  
 Trinity Neighborhood House, 406 Meriden Street

**FITCHBURG**

Visiting Nurse Association, 9 Prichard Street

**FRAMINGHAM**

Community Health Station, Community Health and Tuberculosis Demonstration of the National Tuberculosis Association, Crouch Building

**GREAT BARRINGTON**

Visiting Nurse Association, 2 Brainard Avenue

**HOLYOKE**

Child Welfare Commission of Holyoke, 34 Sargeant Street

**HYDE PARK**

Hyde Park Branch District, Nursing Association

**LOWELL**

Lowell Guild, 17 Dutton Street

**NEW BEDFORD**

Instructive Nursing Association, 203 Coffin Building  
 New Bedford Children's Aid Society, 12 South 6th Street

**NEWBURYPORT**

Newburyport Health Centre

**SPRINGFIELD**

Springfield Day Nursery Corporation, 103 William Street  
 Visiting Nurse Association, 3 Market Street

**WORCESTER**

Worcester Society for District Nursing, 27 Elm Street

**Michigan****BATTLE CREEK**

Alumnae Association, Battle Creek Sanitarium and Hospital Training School for Nurses

**BENTON HARBOR**

Child Welfare Association, Room 6, Traction Building

**DETROIT**

Babies Milk Fund of the V. N. A., 4708 Brush Street  
 Children's Free Hospital Association, Antoine and Farnsworth Streets

Farrand Training School Alumnae Association, Harper Hospital  
 Merrill-Falmer School, 71 Ferry Avenue, East

**GRAND RAPIDS**

Clinic for Infant Feeding, Cor Louis and Market Streets

**LANSING**

Bureau of Education, Michigan State Department of Health

**Minnesota****DULUTH**

Infant Welfare Department, Duluth Consistory  
 Scottish Rite Masons, Masonic Temple

**MINNEAPOLIS**

Infant Welfare Society, 414 S. 8th Street  
 Council of Social Agencies, 609 Second Avenue, South  
 Visiting Nurse Association, 414 S. 8th Street

**ROCHESTER**

St. Mary's Training School for Nurses

**ST. PAUL**

Minnesota State Board of Health, State Capitol  
 St. Paul Baby Welfare Association, Wilder Building

**JACKSON****Mississippi**

Bureau of Child Welfare, State Board of Health

**COLUMBIA****Missouri**

Missouri State Nurses' Association, Missouri University

**KANSAS CITY**

Friendly House, 1907 Indiana Avenue  
 Minute Circle Clinic, 1518 Spruce Street  
 St. Luke's Child Welfare Club, 1843 West Pennway  
 Thomas H. Swope Settlement, 1608 Campbell Street

**ST. LOUIS**

Board of Religious Organization, 417 Victoria Building  
 Missouri School of Social Economy, University  
 Missouri, 2338 South Broadway  
 Missouri Tuberculosis Association, 706 Pontiac Building  
 Municipal Nurses' Board, 209 Municipal Courts Building  
 St. Louis Children's Aid Society, Vanol Building, Vandeventer and Olive Streets  
 St. Louis Children's Hospital, 500 South Kingshighway  
 St. Louis Maternity Hospital, 4518 Washington Boulevard  
 St. Louis Pediatric Society, 3525 Pine Street

**Montana****GREAT FALLS**

Montana State Association of Graduate Nurses

**Nebraska****LINCOLN**

Division of Child Hygiene, Department of Public Welfare  
 Extension Service, College of Agriculture

**OMAHA**

Visiting Nurse Association, 505 City Hall

**New Hampshire****BERLIN**

Berlin Mills Company's District Nurse  
 Manchester Board of Health

## New Jersey

## ATLANTIC CITY

Child Federation of Atlantic City, Preston  
Apartments, Atlantic and Pennsylvania  
Avenue

## GREYSTONE PARK

New Jersey State Hospital

## JERSEY CITY

Division of Child Hygiene, 268 Montgomery  
Street

## MONTCLAIR

Board of Health, Municipal Building

## MOORESTOWN

New Jersey Congress of Mothers

## NEWARK

Babies' Hospital, 437 High Street  
Commission for the Blind, 9-11 Franklin Street

## ORANGE

Diet Kitchen of the Oranges, 17 North Essex  
Avenue

## PARSIPPANY

Morris County Children's Homes

## TRENTON

Division of School Medicine Inspection and  
Welfare Nursing, Room 317 City Hall  
Mercer County Health League, Room 310 City  
Hall

## New York

## ALBANY

James C. Farrell Memorial, 735 Broadway

## AMSTERDAM

Infant and Child's Welfare League, 31 Division  
Street

## BATAVIA

Batavia Infant Welfare Association, 24 West  
Main Street

## BROOKLYN

Brooklyn Chapter, A. R. C., 165 Remsen Street  
Brooklyn Children's Aid Society, 72 Schermer-  
horn Street  
Brooklyn Pediatric Society, 4402 12th Avenue  
Maternity Center Association, 11 Tillary Street  
Visiting Nurse Association of Brooklyn, 80  
Schermerhorn Street

## BUFFALO

District Nursing Association, 181 Franklin Street

## CANAAN

Berkshire Industrial Farm

## JAMESTOWN

Visiting Nurse Association, Inc., Market Building

## NEWBURGH

Associated Charities, 21 Grand Street

## NEW YORK

American Nurses Association, 370 Seventh Ave.  
Babies Hospital, 657 Lexington Avenue  
Berwind Free Maternity Clinic, 125 East 103d  
Street  
Bryson Day Nursery, 151 Avenue B  
Child Welfare League of America, 130 East 22d  
Street  
Children's Welfare Federation, 305 Pearl Street  
County Agencies Department of the State  
Charities Aid Association, 105 East 22d  
Street  
Federation for Child Study, 2 West 64th Street  
Greenwich House Health Center, 27 Barrow  
Street  
Henry Street Settlement, 265 Henry Street  
A. Jacobi Division for Children of the Lenox Hill  
Hospital, 136 West 87th Street  
Judson Health Centre, 243 Thompson Street

Maternity Center Association, Penn Terminal  
Building, 370 Seventh Avenue  
Mulberry Community House, 256 Mott Street  
National Child Welfare Association, 70 Fifth  
Avenue

National Federation of Day Nurseries, 289  
Fourth Avenue

National Organization for Public Health Nurs-  
ing, 370 Seventh Avenue, Penn Terminal  
Building

National Tuberculosis Association, 370 Seventh  
Avenue

New York Academy of Medicine, 17 West 43d  
Street

New York Association for Improved Conditions  
of Poor, 105 East 22d Street

New York County Chapter, A. R. C., Health  
Service Department, 598 Madison Avenue

New York Diet Kitchen Association, Penn  
Terminal Building, 370 Seventh Avenue

New York Nurse and Child Hospital, Social  
Service Department, 161 West 61st Street

Presbyterian Hospital, Out-Patient Department,  
Madison Avenue and 70th Street

The Sloane Hospital for Women, 447 West 59th  
Street

State Charities Aid Association, 105 East 22d  
Street

Sub-Committee for Mothers and Infants, New  
York State Charities Aid Association, 105  
East 22d Street

## RIVERDALE-ON-HUDSON

Riverdale Health League

## ROCHESTER

Bureau of Health

Rochester General Hospital, Social Service De-  
partment

Tuberculosis Committee of Rochester and Mon-  
roe County

## SYRACUSE

Child Welfare Committee, 508 East Genesee  
Street

St. Mary's Maternity Hospital and Infant  
Asylum, 1601 Court Street

Visiting Nurse Association, 511 South Warren  
Street

The Solvay Circle, Solvay Process Company

## TROY

The Troy Woman's Club, 9 Lake Avenue

## UTICA

Baby Welfare Committee of Utica, Inc., 318  
Genesee Street

## North Carolina

## KINSTON

The Caswell Training School, Box 191

## RALEIGH

Bureau of Maternity and Infant Hygiene of the  
State Board of Health

## Ohio

## CANTON

Canton Day Nursery Association, Cleveland  
Avenue, South

## CINCINNATI

Babies Milk Fund Association, Care of Out-  
Patient Dispensary, General Hospital

Free Dental Clinic Society, Guilford School, 4th  
and Ludlow Streets

Home for the Friendless and Foundlings, 433  
West Court Street

Ohio State Association of Graduate Nurses, Cin-  
cinnati General Hospital

Public Health Federation, 25 East 9th Street  
Visiting Nurse Association, 220 West Seventh  
Avenue

**CLEVELAND**

American Red Cross Teaching Center, 2525 Euclid Avenue  
 Associated Charities, 614 Electric Building  
 Babies Dispensary and Hospital, 2500 East 35th Street  
 Board of Health  
 Catherine Horstmann Home, 4270 Riverside Drive, West Park  
 Catholic Charities Office, Standard Theatre Building  
 Children's Aid Society, 10427 Detroit Avenue  
 Children's Bureau, 512 Electric Building  
 Children's Fresh Air Camp, 1107 Buckeye Road  
 Cleveland Christian Orphanage, 10907 Lorain Avenue  
 Cleveland Congress of Mothers and Parent Teachers' Association, Y. W. C. A., Prospect and East 18th Street  
 Cleveland Day Nursery and Free Kindergarten Association, 2050 East 96th Street  
 Cleveland Federation of Women's Clubs, 1830 East 97th Street  
 Cleveland Humane Society, City Hall  
 Cleveland Mouth Hygiene Association, 701 Schofield Building  
 Cleveland Nutrition Clinics, 817 Williamson Building  
 Cleveland Protestant Orphan Asylum, 5000 St. Clair Avenue  
 Council Educational Alliance, 3754 Woodland Avenue  
 County Board of Health, Old Court House  
 East Cleveland Welfare Association, 14149 Euclid Avenue  
 Federation of Jewish Charities, 1529 Guardian Building  
 Graduate Nurses' Association, 2157 Euclid Avenue, N. E.  
 Home of the Holy Family, West Park  
 Jones Home, 3518 West 25th Street  
 St. Ann's Maternity Hospital, 3409 Woodland Avenue  
 St. John's Orphanage, 2619 Franklin Avenue  
 St. Joseph's Orphan Asylum, 6431 Woodland Avenue  
 St. Vincent's Orphan Asylum, 3315 Monroe Avenue  
 Salvation Army Rescue Home, 5905 Kinsman Road  
 The Visiting Nurse Association of Cleveland, 2157 Euclid Avenue

**COLUMBUS**

Instructive District Nursing Association, 276 East State Street

**EATON**

Preble County Board of Health

**ELYRIA**

Ohio Society for Crippled Children, East River and Broad Streets

**TOLEDO**

Toledo District Nursing Association, 1517 Monroe Street

**YOUNGSTOWN**

Visiting Nurse Association, 102 East Front Street

**Oklahoma****OKLAHOMA CITY**

Oklahoma Public Health Association, 315 Oklahoma Building  
 Tuberculosis Society of Oklahoma City, 410 Empire Building

**TULSA**

Tulsa County Public Health Association, 15 West 11th Street

**Oregon****GRANTS PASS**

Woman's Christian Temperance Union

**MEDFORD**

Woman's Christian Temperance Union

**PORTLAND**

Bureau of Public Health Nursing and Child Hygiene, 1021 Selling Building  
 Cooperative Infant Welfare Society of Oregon, Journal Building  
 Visiting Nurse Association, 1004 Spalding Bldg  
 Young Woman's Christian Association

**ROSEBURG**

Woman's Christian Temperance Union

**Pennsylvania****BETHLEHEM**

Baby Health Station, Second and Polk Streets

**CHESTER**

Child Health Centre

**DU BOIS**

Du Bois Chapter, A. R. C., 5 West Long Avenue

**ERIE**

Erie County Anti-Tuberculosis Society, 510 State Street

**HARRISBURG**

Department of Public Instruction

**PHILADELPHIA**

Association of Day Nurseries, 1340 Lombard Street

Babies' Hospital, South 7th and DeLancey Streets

Child Federation, 1506 Locust Street

Children's Bureau, 1432 Pine Street

Children's Hospital, Department for Prevention of Disease, Bainbridge, 18th and Fitzwater Streets

Community Health Center, 423 Bainbridge Street

Health Council and Tuberculosis Association, 10 South 18th Street

Philadelphia Pediatric Society, 4103 Walnut Street

Preston Retreat, 20th and Hamilton Streets

St. Christophers Hospital, Social Service Department, Lawrence and Huntington Streets

Starr Center Association, 725 Lombard Street

**PITTSBURGH**

The Federation of Jewish Philanthropies, 601 Washington Trust Company Building

Public Health Nursing Association, 600 Grant Street, Room 501

Tuberculosis League of Pittsburgh, 2851 Bedford Avenue

**READING**

Visiting Nurse Association, 429 Walnut Street

**SCRANTON**

District Nurse Association, 228 Adams Avenue

**WILKES-BARRE**

Visiting Nurse Association, Coal Exchange Building

**YORK**

Visiting Nurse Association, 47 East Market Street

**Philippine Islands****MANILA**

College of Medicine and Surgery, University of the Philippines

Liga Nacional Filipina Para de la Protection de la Primera Infancia, 851 Lepanto, Sampaloc  
 Philippines Chapter, American Red Cross, Box 1303

Public Welfare Board, Fijardo Building, 640 Rizal Avenue

St. Paul Hospital, Walled City

**Rhode Island**

**PROVIDENCE**  
 Child Welfare Department Rhode Island Congress of Mothers and Parent-Teacher Association, 96 Alumni Avenue  
 Division of Child Hygiene Providence Health Department  
 Providence Child Welfare Committee, 141 Cypress Street  
 Providence District Nursing Association, 118 North Main Street  
 Division of Child Welfare, State Board of Health

**South Carolina**

**GREENVILLE**  
 Emma Moss Booth Memorial Hospital

**South Dakota**

**ABERDEEN**  
 Brown County Red Cross Health Unit

**WAUBAY**  
 State Board of Health

**Texas**

**AUSTIN**  
 Bureau of Child Hygiene and Public Health Nursing, State Board of Health  
 Home Economics Extension, University of Texas

**DALLAS**  
 Civic Federation, 415 Dallas County State Bank Bldg.

**Utah**

**LOGAN**  
 Utah Agricultural College, Extension Service

**Vermont**

**PROCTOR**  
 Cavendish House, Inc.

**Virginia**

**NORFOLK**  
 King's Daughters Visiting Nurse Association, 300 West York Street

**RICHMOND**  
 Bureau of Child Welfare and School Hygiene, State Board of Health

**Washington**

**SEATTLE**  
 Health Department, Public Safety Building

**SPOKANE**  
 Salvation Army Rescue Home, 3422 Garland Avenue

**Wisconsin**

**BELOIT**  
 Visiting Nurse Association, 422 Public Avenue

**MILWAUKEE**

Bureau of Child Hygiene, of the Department of Health  
 Children's Free Hospital, 219 Tenth Street  
 Department of Health  
 Infants' Hospital, 477 Bradford Avenue  
 Visiting Nurse Association, Pereles Building

**CANADA****Alberta**

**EDMONTON**  
 Department of Public Health, Province of Alberta

**British Columbia**

**VICTORIA**  
 Provincial Board of Health

**New Brunswick**

**FREDERICTON**  
 New Brunswick Department of Health

**Nova Scotia**

**HALIFAX**  
 Massachusetts Halifax Health Commission, Health Centre Number One, Admiralty House

**Ontario**

**HAMILTON**  
 Babies' Dispensary Guild, 12 Euclid Avenue

**OTTAWA**  
 Department of Health, Elgin Building

**TORONTO**  
 Bureau of Child Welfare, Ontario Provincial Board of Health, Spadina House, Spadina Crescent  
 Department of Public Health, City Hall  
 Department of Public Health Nurses, 1 Queens Park

**Quebec**

**MONTREAL**  
 Child Welfare Association, Room 702 Blumenthal Building, 207 St. Catherine Street, West

**FOREIGN****Brazil**

**RIO DE JANEIRO**  
 Commissao Rockefeller, Caixa Postal Numero 49

**China**

**SHANGHAI**  
 Council on Health Education, 4 Quinsan Gardens

**Poland**

**WARSAW**  
 Warsaw School of Nursing, U 1 Smolna 6

**Spain**

**MADRID**  
 Escuela Superior del Magisterio, Montalban, 20

**LIBRARY MEMBERS****UNITED STATES****Alabama**

**MONTGOMERY**  
 Alabama State Department of Archives and History

**Arizona**

**BISBEE**  
 Bisbee School Library

**Arkansas**

**LITTLE ROCK**  
 Public Library

**California**

**BAKERSFIELD**  
 Kern County Free Library

**LOS ANGELES**  
 Public Library

**SALINAS**  
 Monterey County Free Library

**SAN FRANCISCO**  
 Lane Medical Library  
 Library, University of California Medical School

**Connecticut**

HARTFORD  
Connecticut State Library

NEW HAVEN  
Religious Education Library

**District of Columbia**

WASHINGTON  
Walter Reed U. S. General Hospital Library

**Illinois**

CHICAGO  
Chicago Public Library  
The John Crerar Library

EVANSTON  
Free Library

SPRINGFIELD  
Public State Library

**Indiana**

LAFAYETTE  
Purdue University Library

**Iowa**

IOWA CITY  
Library, State University of Iowa

**Kansas**

LAWRENCE  
Library, University of Kansas

**Kentucky**

LOUISVILLE  
Free Public Library

**Maryland**

BALTIMORE  
Library, Johns Hopkins University

**Massachusetts**

BOSTON  
Public Library  
Social Service Library, Simmons College

CAMBRIDGE  
Library, Massachusetts Institute of Technology

WOBURN  
Public Library

**Michigan**

ADRIAN  
Public Library

ANN ARBOR  
General Library, University of Michigan

DETROIT  
Public Library

FLINT  
Public Library

GRAND RAPIDS  
Grand Rapids Public Library

**Minnesota**

MINNEAPOLIS  
Library, University of Minnesota  
Public Library

ST. PAUL  
Library, University Farm

**Missouri**

JEFFERSON CITY  
Missouri Library Commission

JOPLIN  
Free Public Library

KANSAS CITY  
Library, Jackson County Medical Society  
Public Library

ST. LOUIS  
Public Library

SEDALIA  
Public Library

**New Hampshire**

MANCHESTER  
Manchester City Library

**New Jersey**

EAST ORANGE  
Free Public Library

NEWARK  
Free Public Library

**New York**

NEW YORK  
American Institute of Medicine  
Library, Metropolitan Life Insurance Company

NIAGARA FALLS  
Niagara Falls Public Library

SYRACUSE  
The Library, College of Medicine, Syracuse University

WATERTOWN  
Flower Memorial Library

**North Carolina**

CHAPEL HILL  
Library, University of North Carolina

**Ohio**

CINCINNATI  
Library, University of Cincinnati  
Public Library  
Adelbert College Library  
Cleveland Medical Library Association

COLUMBUS  
Library Ohio State University

**Oregon**

CORVALLIS  
Library, Oregon Agricultural College

EUGENE  
University of Oregon Library

SALEM  
Oregon State Library

**Pennsylvania**

BRYN MAWR  
Bryn Mawr College Library

HARRISBURG  
Library Department, Division of Public Health  
Education

PHILADELPHIA  
Library, College of Physicians  
Free Library

PITTSBURGH  
Library, Pittsburgh Academy of Medicine

**Rhode Island**

PROVIDENCE  
Public Library

**South Dakota**

SIOUX FALLS  
Carnegie Library

**Tennessee**

CHATTANOOGA  
Public Library



**AUSTIN**                    **Texas**  
Texas State Library

**BRATTLEBORO**       **Vermont**  
Free Library

**SEATTLE**               **Washington**  
Library, University of Washington

**HALIFAX**               **CANADA**  
Medical Library       **Nova Scotia**  
Dalhousie University

**TORONTO**  
Library Academy of Medicine

**MONTREAL**           **Quebec**  
Medical Library, McGill University

# GEOGRAPHICAL LIST OF THE MEMBERS

## OF THE

### AMERICAN CHILD HYGIENE ASSOCIATION

SEPTEMBER 30, 1922

#### UNITED STATES AND INSULAR POSSESSIONS

##### ALABAMA

###### Bessemer

McConnell, Mrs J. W.

###### Birmingham

Garber, Dr. James R.  
Social Science Works, Tennessee Coal, Iron &  
Railroad Co. (Affil.)  
Snyder, Dr. J. Ross

###### Montgomery

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Powers, Dr. L. M.  
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 Kennedy, Mr. D. M.  
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 Seward, Mr. W. R.  
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Cleveland Nutrition Clinics (Affil.)  
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